

Application to Amend Certificate of Compliance



Applicants: TransCanada Keystone Pipeline, LP  
Project: TransCanada Keystone XL Pipeline  
Certificate: March 30, 2012, Certificate of Compliance; TransCanada Keystone Pipeline, LP  
Date: December 21, 2018  
Notice Date: December 11, 2018 (Glasgow Courier) and December 21, 2018 (Miles City Star, Billings Gazette, and The Fallon County Times)

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The above-referenced Applicant (“Keystone”) hereby requests to amend the above-referenced Certificate of Compliance (“Certificate”) pursuant to Section 75-20-219, MCA. The requested amendment, and the information required to support this request, are set out below and in the included materials.

- 1. Amendment Requested.** The March 2012 Certificate of Compliance issued for this project states that “[u]nless requested by the affected LANDOWNER, the OWNER shall use locally adapted sagebrush seed, collected within 100 miles of the areas to be determined.” Keystone believes that the radius of the locally adopted sagebrush seed of 100 miles is not large enough to provide adequate seed to successfully reclaim the area. Instead, Keystone believes that the radius of the locally adapted sagebrush seed should be increased from 100 miles to either 300 miles or as defined by seed transfer zones. Accordingly, Keystone requests the following amendment to the Certificate.

*Sensitive Area Modification:*

- Unless requested by the affected LANDOWNER, the OWNER shall use locally adapted sagebrush seed, collected within 300 miles of the areas to be reclaimed or from appropriate seed transfer zones (as defined by the NRCS and USFS) in order to ensure that adequate amounts of ecologically appropriate, locally adapted sagebrush seed are available to achieve successful reclamation.

This revision allows for a larger supply of ecologically appropriate, locally adapted sagebrush seed to be used for reclamation than the amount that can be collected in the previously required radius of 100 miles.

- 2. Public Notice of Amendment Request.** Proof that notice of this amendment application was given in accordance with Section 75-20-213(1), MCA, is set forth under **Tab A**.
- 3. Background of and Reasons for Amendment Request.** This amendment is intended to address reclamation challenges posed by the original design. The proposed modification is described as follows:
  - The proposed modification does not create a substantive change to the Certificate.

- The proposed modification does not create new or increased levels of impacts from that disclosed in the FEIS prepared in support of the Certificate issued for the project.
  - The proposed modification meets tests of engineering, construction, and regulatory feasibility.
  - The proposed modification does not increase structure count or line length.
4. **Requirements.** In respect to the issues addressed in the application and the FEIS, the application requirements set out in ARM § 17.20.801 *et. seq* and MDEQ MFSA Circular 2 were satisfied in Keystone’s prior filings in respect to the Certificate, which to the extent necessary are incorporated herein by this reference. Pursuant to ARM § 17.20.802 and .803, twenty (20) copies of this application are submitted in loose-leaf format.
5. **Department decision under Section 75-20-219, MCA.** Under Section 75-20-219(I), MCA, within 30 days after notice of an amendment to the certificate is given, the Department is required to determine whether the proposed amendment would result in a material increase in any environmental impact on the facility or a substantial change in the location of all or a portion of a facility as set forth in the certificate. If the Department determines that the proposed amendment would result in a material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of the facility, the Department shall grant, deny, or modify the amendment with conditions as it considers appropriate.

Under Section 75-20-219(2), MCA, if the Department determines that the proposed amendment would not result in a material increase in any environmental impact or would not be a substantial change in the location of the facility, the Department shall automatically grant the amendment either as applied for or upon terms or conditions that the Department considers appropriate.

The proposed amendment does not result in any material increase in any environmental impact and would not be a substantial change in the location of the pipeline.

Based on previous efforts, Keystone does not believe that adequate amounts of sagebrush seed are available for commercial collection within 100 miles of the project. Keystone has contracted with native seed collectors over three seasons in 2011, 2012, and 2013 to attempt to find stands of silver sagebrush (*Artemisia cana*) and Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) that are within 100 miles of the areas to be reclaimed, are appropriate for commercial collection, and where permission can be obtained from the landowner. To date those efforts have met with limited success. Consequently, it is unlikely in 2018 or 2019 that adequate sagebrush seed will be available within 100 miles of the areas to be reclaimed. Successful sagebrush establishment is also an Environmental Specification of the MFSA Certificate. It is unlikely that this specification will be achieved without adequate amounts of sagebrush seed.

Keystone notes that the Bureau of Land Management (BLM) will allow sagebrush from within 300 miles north and 200 miles south of the Project, with east/west distances determined by elevation and precipitation data (see attached BLM Contact Record).

Further, the Natural Resource Conservation Service (NRCS) and U.S. Forest Service (USFS) have recently developed seed transfer zone maps that define seed zones which are, “an area within which plant materials can be transferred with little risk of being poorly adapted to their new location” (<https://www.fs.fed.us/wwetac/threat-map/TRMSeedZoneMapper.php>). These seed zones are much larger than 100-mile radii around the Project and provide research-based rationale for identifying locally adapted sagebrush seed from a much larger region.

In summary, there is federal agency and research concurrence that support larger collection zones than 100 miles. Larger collection zones will increase the likelihood that adequate amounts of sagebrush seed will be available for reclamation and that sagebrush establishment will be successful.

Successful sagebrush establishment depends on a variety of factors including: appropriate seed rates, locally adapted seed, a suitable seed bed, timing of seeding, and weather conducive to seed germination and survival. Keystone has developed construction/reclamation (con/rec) units for a variety of land uses and habitats, including sagebrush habitat, that define seeding methods and timing to ensure successful sagebrush establishment. These methods include establishing an appropriate seedbed, and applying seed at the appropriate time of year and with the appropriate equipment. Each con/rec unit has been reviewed and approved by appropriate natural resource agencies including the NRCS and BLM. In particular, the sagebrush con/rec unit specifies sagebrush seed rates that are known to enhance sagebrush establishment.

The methods described in the sagebrush con/rec unit are intended to establish sagebrush on the project to provide habitat for sagebrush dependent wildlife and to achieve the MFSA Certificate Environmental Specification for establishment which states:

“The OWNER and DEQ shall establish criteria in conjunction with the FWP and BLM to determine when reclamation of sagebrush communities has been successful, based on the pre- and post-construction studies described above.”

Keystone defined successful sagebrush establishment criteria in consultation with DEQ, BLM, and Fish, Wildlife, and Parks (FWP) on January 31, 2013. The criteria are derived from the shrub standard for bond release on coal mining operations in Wyoming which is one of the more stringent standards in the west for sagebrush establishment. The standard is included in Attachment 1 of the *Greater Sage-Grouse Conservation Plan for the Keystone XL Project* (April 2017).

In particular, restoring sagebrush habitat and meeting the sagebrush establishment criteria will require adequate amounts of sagebrush seed. Sagebrush seed rates were established based on peer-reviewed research regarding sagebrush establishment, agency input, and Keystone’s experience restoring sagebrush habitat on other pipelines. Typically, greater sagebrush establishment is enhanced with greater sagebrush seed rates (Schuman and Booth 1998). Sagebrush seed rates between 2 and 5 pounds pure live seed (PLS) per acre are often required to successfully establish sagebrush stands (Fortier et al. 1999, Booth and Bai 2000, Hild et al. 2006). Based on this research, Keystone has specified sagebrush seed rates of between 3 and 5 pounds PLS in areas where sagebrush currently occurs on the project. In

total, Keystone will need approximately 2,000 pounds PLS of sagebrush seed which equates to approximately 6,000 to 10,000 bulk pounds of sagebrush seed, depending on seed purity and viability.

Acquiring 6,000 to 10,000 bulk pounds of sagebrush seed within a 100-mile radius of the project is unlikely, although Keystone has collected approximately 3,000 bulk pounds of sagebrush seed within the 100-mile radius to date. Still, as noted, Keystone has contracted with native seed collectors over three seasons in 2011, 2012, and 2013 to attempt to find stands of silver sagebrush and Wyoming big sagebrush that are within 100 miles of the areas to be reclaimed. To date those native seed collectors have not identified large enough stands within that radius to ensure that 6,000 to 10,000 bulk pounds of sagebrush seed will be collected. Limiting factors include: convenient access to the stand, landowner permission, stand composition comprised of healthy plants with significant seed production, and topography that is conducive to collecting on a commercial level.

Although Keystone anticipates that the required amount of sagebrush seed will not be available from within 100 miles of the project, Keystone is committed to collecting as much sagebrush seed as possible within 100 miles of the project. In October 2018, Keystone contracted with a large and reputable native seed firm to collect as much silver sagebrush and Wyoming big sagebrush seed as possible within the 100-mile radius. Consequently, Keystone will comply with the 100-mile radius origin to the greatest extent practicable and could acquire all of the sagebrush seed from within that radius if production in 2018 is extremely high.

However, because: 1) sagebrush seed rates between 2 and 5 pounds PLS are known to provide the best chance of successful sagebrush establishment; 2) this amount of seed may not be available within a 100-mile radius of the project; and 3) there is a specific sagebrush establishment criterion also required within the MFSA Certificate, Keystone believes it is prudent to enlarge that area to other sites with ecologically appropriate, locally adapted seed. The 100-mile origin radius within the MFSA Certificate is not consistent with more recent research regarding sagebrush ecology and restoration. Keystone proposes to enlarge this radius to be consistent with research that supports a larger origin radius and to ensure that adequate amounts of sagebrush seed are available to restore sagebrush habitat and meet the sagebrush establishment criteria.

The BLM specified a 300-mile collection distance to the north, a 200-mile collection distance to the south, and east-west distances determined by elevation and precipitation. Mahalovich and McArthur (2004) likewise determined that a 300-mile radius is an appropriate transfer distance for sagebrush seed, but also noted that if seeds are acquired from further distances they should originate from a harsher environment (e.g., further north or higher elevation). Subsequent to this work, the NRCS and USFS developed seed transfer zone maps that define seed zones which are, “an area within which plant materials can be transferred with little risk of being poorly adapted to their new location”.

Based on the BLM’s requirement and peer-reviewed research, Keystone believes it is defensible to enlarge the collection radius for sagebrush seed to 300 miles from the project or other sites/regions that are appropriate as defined by seed transfer zones. Keystone believes

there is significant evidence to support the position that silver sagebrush and Wyoming big sagebrush seed acquired within 300 miles of the project or from within appropriate seed transfer zones is consistent with the original MFSA Certificate Environmental Specification that, "the OWNER shall use locally adapted sagebrush seed". Consequently, Keystone is submitting this amendment to acquire ecologically appropriate, locally adapted sagebrush seed from within 300 miles of the areas to be reclaimed, or from appropriate seed transfer zones.

Citations:

Booth, D & Bai, Yuguang. (2000). Seeds and Seedling Establishment of Wyoming Big Sagebrush. Available at: [https://www.researchgate.net/publication/238621866\\_Seeds\\_and\\_Seedling\\_Establishment\\_of\\_Wyoming\\_Big\\_Sagebrush](https://www.researchgate.net/publication/238621866_Seeds_and_Seedling_Establishment_of_Wyoming_Big_Sagebrush). Accessed January 2004.

Fortier, M. I., G. E. Schuman, A. L. Hild, and L. E. Vicklund. 1999. Effects of seeding rates and competition on sagebrush establishment on mined lands. Project Review Seminar. Abandoned Coal Mine Land Research Program. November 17, 1999, Gillette, WY.

Hild, A.L., G.E. Schuman, L.E. Vicklund, M.I. Williams. 2006. Canopy Growth and Density of Wyoming Big Sagebrush Sown with Cool-Season Perennial Grasses. Arid Land Research and Management. 20:183-194.

Mahalovich, M.F. and E.D. McArthur. 2004. Sagebrush Seed and Plant Transfer Guidelines. Native Plants Journal. 5:141-148.

Schuman, G.E. and T. Booth. 1998. Strategies for Establishment of Big Sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) on Wyoming Mined Lands. High Plains Grasslands Research Station. Abandoned Coal Mine Land Research Program.

Due to the limited nature of this change, there are no material changes in the basis of any finding of public interest, convenience and necessity; need; or minimum impact standards, pursuant to subchapter 16.

Because the proposed amendment does not result in any material increase in the environmental impact of the pipeline and does not result in a substantial change in the location of the facility, the Department should automatically grant the amendment under Section 75-20-219(2), MCA.

DATED this 21th day of December, 2018.

TransCanada Keystone Pipeline, LP  
By its agent TC Oil Pipeline Operations, Inc.

Signed: Gayle Konik  
Name: Gayle Konik  
Title: Manager, Environment

**1. Amendment Requested.** Keystone requests the following amendment to the Certificate.

*A. Certificate, Attachment 1B, Environmental Conditions, Appendix A: Sensitive Areas, the fifth full bullet point on page 4 should be amended as follows:*

Unless requested by the affected LANDOWNER, the OWNER shall use locally adapted sagebrush seed, collected within 100 300 miles of the areas to be reclaimed or from appropriate seed transfer zones.

**TAB A – Proof of Public Notice**

# AFFIDAVIT OF PUBLICATION

STATE OF MONTANA

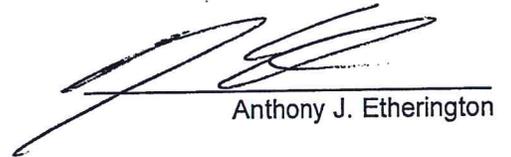
County of Valley

Anthony J. Etherington being duly sworn, upon oath says: That he is the Publisher of The Glasgow Courier, a newspaper of general circulation published once each week at Glasgow, in the county of Valley, State of Montana. That the notice hereunto attached was published in the said Glasgow Courier once each week for One (1) successive week.

That the first publication of said notice was on the 12th day of December 2018.

That the last publication of said notice was on the 12th day of December 2018.

That the said notice was published in the regular and entire issue of every number of the said Glasgow Courier, during the period and time of said publication, and in the newspaper proper and not in the supplement.

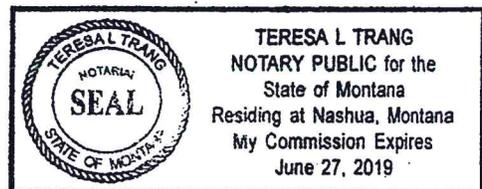
  
Anthony J. Etherington

State of Montana  
County of Valley

Signed or acknowledged before me

on Dec 13, 2018 by Anthony J. Etherington

  
Teresa L. Trang



Cost of Publication: Folios 1 Publication \$42.00

2 Columns by 2.5 Inches Display Ad - 5" @\$8.40

The rate charged for the above legal printing does not exceed the minimum going rate charged to any other advertiser for the same publication set in the same size type and published for the same number of insertions.

## PUBLIC NOTICE

Pursuant to Section 75-20-213(1), MCA, permittee TransCanada Keystone Pipeline, LP (TransCanada) gives notice that on December 20, 2018, it will file with the Montana Department of Environmental Quality (DEQ) an application to amend the March 2012 Certificate of Compliance (Certificate) relating to the Keystone XL Pipeline as follows:

Unless requested by the affected LANDOWNER, the OWNER shall use locally adapted sagebrush seed, collected within 300 miles of the areas to be reclaimed or from appropriate seed transfer zones.

A complete copy of the Certificate and TransCanada's application is available by calling (406) 444-0514, or on the DEQ's website <http://deq.mt.gov/DEQAdmin/rms/keystone-xl/keystone-xl-comprehensive>.

Pursuant to Section 75-20-219, MCA, DEQ must make a determination on TransCanada's request within 30 days of the date it is filed with DEQ. Comments on the application submitted by the public and otherwise affected parties must be received by DEQ by close of business on January 4, 2019. Comments may be submitted by mail to Craig Jones, MEPA/MFSA Coordinator, Montana Department of Environmental Quality, P.O. Box 200901, Helena, Montana, 59620-0901.

(Published Dec. 12, 2018)

MNAXLP

**AFFIDAVIT OF PUBLICATION  
THE BILLINGS GAZETTE**

401 N 28<sup>th</sup> St

Billings, MT 59101

Phone: (406) 657-1212 Fax: (406) 657-1345

Ad Number: 20875179

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Published December 21, 2018

Tasha Garfield, being first duly sworn, deposes and says. That she is the principal clerk of The Billings Gazette, a newspaper of general circulation published daily in the City of Billings, in the County of Yellowstone, State of Montana, and has charge of the Advertisements thereof.

That the: 42 line legal regarding: a true copy of which is hereto annexed, was published in said newspaper on the following dates: via:

12-21-18

Making all 1 publication(s)

Mark below if certification for the State of Montana  
I hereby certify that I have read sec. 18-7-204 and 18-7-205, MCA, and subsequent revisions, and declare that the price or rate charged the State of Montana for the publication for which claim is made in the attached papers in the amount of \$ \_\_\_\_\_ is not in excess of the minimum rate charged any other advertiser for publication of advertisement, set in the same size type and published for the same number of insertions, further certify that this claim is correct and just in all respects, and that payment or credit has not been received

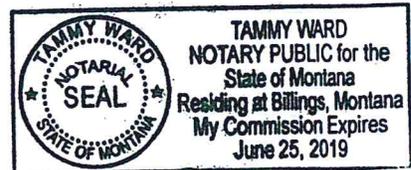
Tasha Garfield

STATE OF MONTANA  
County of Yellowstone

On this day of Dec 21, 2018 before me, the undersigned, a Notary Public for the State of Montana, personally appeared Tasha Garfield known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed same. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Tammy Ward  
NOTARY PUBLIC for the State of Montana  
Residing at Billings, MT

My commission expires: June 25, 2019





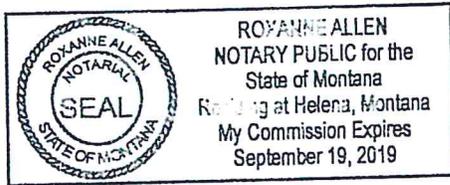
Montana Newspaper Association  
825 Great Northern Boulevard Suite 202 Helena MT 59601  
406-443-2850 | fax 406-443-2860 | e-mail randy@mtnewspapers.com

### AFFIDAVIT OF INSERTION

This will certify that the print advertisement for the "TransCanada Keystone Pipeline, LP", was inserted and published in the following newspapers:

Fallon County Times, Billings Gazette, and Miles City Star

With a total circulation of 113,056 on the date 12/21/2018.



Stacy Wirtz  
Stacy Wirtz Business Development Director  
Date 12/21/18

Subscribed and sworn to before me this

21<sup>st</sup> day of December, 2018.

Notary Public for the State of Montana

Residing at Helena

My commission expires 09-19-2019

20    .

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(Published December 21, 2018)

MNAXLP

**CERTIFICATE OF SERVICE**

This is to certify that on December 21, 2018, as required by § 75-20-219(1)(a), MCA, I, Brian Holland, placed in the United States Mail, postage prepaid, a copy of the foregoing Application to Amend Certificate of Compliance to the Department of Environmental Quality (“DEQ”), addressed as follows to DEQ, the only active party to the original proceedings before DEQ on the Certificate of Compliance:

Craig Jones  
MEPA/MFSA Coordinator  
Montana Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901

*Brian Holland*

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Brian Holland