U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

JUN 27 2011

Mr. David Chittick
Director, Pipeline Engineering
TransCanada Pipelines Limited
450 – 1st Street, S.W.
Calgary, Alberta, Canada T2P 5H1

Docket No. PHMSA-2010-0192

Dear Mr. Chittick:

On June 24, 2010, TransCanada Pipelines Limited (TCPL) operator of the ANR Pipeline Company (ANR) wrote to the Pipeline and Hazardous Materials Safety Administration (PHMSA) requesting a special permit to waive compliance from PHMSA's pipeline safety regulation in 49 CFR § 192.611, for one (1) segment of the ANR natural gas transmission pipeline system located in St. Martin Parish, Louisiana. The regulation requires confirmation or revision of the maximum allowable operating pressure (MAOP) of a pipeline segment where the class location has changed.

PHMSA is denying your June 24, 2010, special permit application. PHMSA's denial is based on TGPL's compliance history, as an operator, with existing special permits. Specifically, TGPL's failure to perform weekly aerial patrols and quarterly ground patrols as required by the special permit conditions in the existing special permit (PHMSA-RSPA-2003-15733) that was issued to PNGTS Pipeline Company on March 4, 2004. For additional information concerning PHMSA's review of your application and the basis for our decision, please see the enclosed Special Permit Analysis and Findings document. This and all other pertinent documents are available for review in Docket No. PHMSA-2010-0192 in the Federal Docket Management System (FDMS) located on the internet at www.Regulations.gov.

Pursuant to § 190.341(i), reconsideration of this decision may be sought by petition to the Associate Administrator. Petitions must be received by PHMSA within 20 calendar days of the notice of the denial and must contain a brief statement of the issue and an explanation of why the petitioner believes the decision is not in the public interest. The Associate Administrator may grant or deny, in whole or in part, any petition for reconsideration without further proceedings.

For the special permit application segment identified in the Special Permit Analysis and Findings document, TCPL must complete all pipe replacements, hydrostatic tests, or pressure reductions required to meet the MAOP requirements of § 192.611 by May 31, 2012.

Exhibit 8017

JUN 27 2011

Docket No. PHMSA-2010-0192

My staff would be pleased to discuss this matter or any other regulatory matter with you. John Gale, Director of Standards and Rulemaking, 202-366-0434, may be contacted on regulatory matters and Jeff Gilliam, Director of Engineering and Research, 202-366-0568, may be contacted on technical matters specific to this special permit application.

Sincerely,

Jeffrey D. Wiese
Associate Administrator for Pipeline Safety

Enclosure: Special Permit Analysis and Findings

U.S. DEPARTMENT OF TRANSPORTATION

PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION (PHMSA)

Special Permit Analysis and Findings

Special Permit Information:

Docket Number: PHMSA–2010-0192

Pipeline Operator: TransCanada Pipelines Limited, operator of ANR Pipeline Company[1]

Date Requested: June 24, 2010

Code Section(s): 49 CFR § 192.611(a)

Purpose:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides this information to describe the facts of the subject special permit application submitted by TransCanada Pipelines Limited (TCPL), operator of the ANR Pipeline Company (ANR), to discuss any relevant public comments received with respect to the application, to present the engineering/safety analysis of the special permit application, and to make findings regarding whether the requested special permit should be granted and if so under what conditions.

Pipeline System Affected:

This special permit request involves one (1) *special permit segment* along the 30-inch ANR Lateral Loop 2-716 pipeline natural gas transmission pipeline in St. Martin Parish, Louisiana. The *special permit segment* class location along the pipeline has changed from an original Class 1 location to a Class 3[2] location.

This special permit, if granted, will allow TCPL to continue to operate the one (1) pipeline segment at its current maximum allowable operating pressure (MAOP) of 1050 pounds per square inch gauge (psig) for the 30-inch ANR Lateral Loop 2-716 pipeline.

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[1] ANR Pipeline Company is owned and operated by TransCanada Pipelines Limited.

[2] The Class 3 location *special permit segment* was originally a Class 1 location that was upgraded to Class 2 location in accordance with 49 CFR § 192.611 (a) hydrostatic test.

This special permit application applies to the *special permit segment* defined as follows using the ANR Lateral Loop 2-716 pipeline mile post and valve section survey station references:

- *Special permit segment* is defined as the 30-inch ANR Lateral Loop 2-716 pipeline beginning at Mile Post 54.02 (V4 584+66 feet) between Valve Site 3 and Valve Site 4. The *special permit segment* extends for 3,149 feet along 30-inch ANR Lateral Loop 2-176 and concludes at Mile Post 54.61 (V4 616+15), also between Valve Site 3 and Valve Site 4. The *special permit segment* is located in St. Martin Parish, Louisiana. (Note: The above ground Mile Posts do not correlate exactly with the below ground pipe lengths.)

This special permit application applies to the *special permit inspection area* defined as the area that extends 220 yards on each side of the centerline along the entire length of the 30-inch ANR Lateral Loop 1-716 and 2-716 pipelines as follows:

- *Special permit inspection area* is defined as the pipeline that begins at Mile Post 29.02 at Valve Site 2 (V3 427+75 feet) on Loop 1-716 in Iberia Parish, Louisiana. The *special permit inspection area* extends through Valve Site 3 to Mile Post 43.03 where the ANR pipeline lateral naming convention changes from Loop 1-716 to Loop 2-716 in St. Martin Parish, Louisiana. The *special permit inspection area* continues along Loop 2-176 to Valve Site 4 at Mile Post 55.52 where the ANR pipeline lateral naming convention reverts back to Loop 1-176, also in St. Martin Parish, Louisiana. The *special permit inspection area* continues along Loop 1-176 and concludes at Valve Site 5 at Mile Post 70.78 (V5 00+00 feet) in St. Landry Parish, Louisiana.

The total length of the proposed *special permit inspection area* is approximately 41.76 miles and includes the *special permit segment.*

Special Permit Request

TCPL submitted an application to PHMSA on June 24, 2010, for a special permit seeking relief from the Federal pipeline safety regulations in 49 CFR 192.611(a) for one (1) segment of TCPL's 30-inch ANR Lateral Loop 2-716 natural gas transmission pipeline, where a change has occurred from a original Class 1 location to a Class 3 location in St. Martin Parish, Louisiana.

As requested, this proposed special permit would allow TCPL to continue to operate the pipeline segment at its current maximum allowable operating pressure (MAOP) of 1050 pounds per square inch gauge (psig). The Federal pipeline safety regulations in 49 CFR 192.611(a) require natural gas pipeline operators to confirm or revise the MAOP of a pipeline segment after a change in class location. A special permit, if granted, will allow TCPL to continue to operate the *special permit segment* at its existing MAOP's despite a change in class location.

In its application, TCPL suggested that the *special permit segment* be included in a *special permit inspection area* (see TCPL's application for the specific details). The *special permit inspection area* on the 30-inch ANR Lateral Loops 1-716 and 2-716 pipeline will begin approximately 25 miles upstream of the beginning of the *special permit segment* and approximately 16.17 miles downstream of the *special permit segment.* The *special permit inspection area* would be approximately 41.76 miles in length and will include the *special permit segment.*

Public Notice:

On March 3, 2011, PHMSA posted a notice of this special permit request in the Federal Register (76 FR 11853). The request letter, Federal Register notice, and all other pertinent documents are available for review in Docket No. PHMSA-2010-0192 in the Federal Docket Management System (FDMS) located on the internet at www.Regulations.gov.

PHMSA received no public comments on this application for a class location special permit.

Analysis:

Background: On June 29, 2004, PHMSA published in the Federal Register (69 FR 38948) the criteria it uses for the consideration of class location change waivers, now being granted through a special permit. First, certain threshold requirements must be met for a pipeline section to be further evaluated for a class location change special permit. Second, the age and manufacturing process of the pipe; system design and construction; environmental, operating and maintenance histories; and integrity management program elements are evaluated as significant criteria. These significant criteria are presented in matrix form and can be reviewed in the FDMS, Docket

Number PHMSA-RSPA-2004-17401. Third, such special permits will only then be granted when pipe conditions and active integrity management provides a level of safety greater than or equal to a pipe replacement or pressure reduction.

Threshold Requirements: Each of the threshold requirements published by PHMSA in the June 29, 2004, FR notice is discussed below in regards to the TCPL special permit petition.

1) No pipeline segments in a class location changing to Class 4 location will be considered. This special permit request is for one (1) segment of ANR's 30-inch Lateral Loop 2-716 pipeline where a class location change has occurred from Class 1 to Class 3 location.
2) No bare pipe will be considered. This TCPL *special permit segment* is coated with coal tar enamel coating. TCPL has met this requirement.
3) No pipe containing wrinkle bends will be considered. There are no wrinkle bends in the *special permit segment.* TCPL has met this requirement.
4) No pipe segments operating above 72% of the specified minimum yield strength (SMYS) will be considered for a Class 3 special permit. The *special permit segment* operates at or below 72% SMYS. TCPL has met this requirement.
5) Records must be produced that show a hydrostatic test to at least 1.25 x maximum allowable operating pressure (MAOP) and 90% of SMYS. TCPL records submitted show that the section of the ANR's 30-inch Lateral Loop 2-716 pipeline containing the *special permit segment* has been hydrostatically tested to 1450 psig, which is 1.38 x MAOP and 99% of SMYS. TCPL has met this requirement.
6) In-line inspection (ILI) must have been performed with no significant anomalies identified that indicate systemic problems. The proposed *special permit segment* was last inspected by ILI in 2009, with no immediately actionable anomalies found. TCPL has met this requirement.
7) Criteria for consideration of class location change waiver, now being granted through special permit, published by PHMSA in the Federal Register (69 FR 38948), define a *waiver inspection area (special permit inspection area)* as up to 25 miles of pipe either side of the *waiver segment (special permit segment).* The *special permit inspection area* must be inspected according to TCPL's integrity management program and periodically inspected with an in-line inspection technique. The *special permit inspection area* is approximately

41.76 miles long, which is the entire length of the 30-inch ANR Lateral Loops 1-716 and 2-716 pipeline. This special permit is contingent upon TCPL's incorporation of the *special permit segment* in its written integrity management program as a *"covered segment"* in a *"high consequence area"* (HCA) per 49 CFR § 192.903.

The *special permit segment* meets the threshold requirements.

Criteria Matrix: The original and supplemental data submitted by TCPL for the *special permit segment* have been compared to the class location change special permit criteria matrix. The *special permit segment* falls in the probable acceptance column of the criteria matrix for all criteria except for:

- Possible acceptance – pipe manufacture, pipe coating, and depth of cover.
- Requires substantial justification – none.

The data findings above fall within the "possible acceptance" columns of the criteria matrix and would require some remediation measures as described below:

1) Pipe manufacture: ANR's 30-inch Lateral Loop 2-716 pipeline was installed in 1972, and consists of American Petroleum Institute Specification 5LX, *Specification for Line Pipe* (API 5LX), doubled submerged arc welded (DSAW), X-52 steel pipe manufactured by US Steel Corporation. This pipe is of sufficient toughness – 53 foot-pounds. The ANR Lateral Loop 1-716 and 2-716 pipeline in the *special permit inspection area* has had no leaks or ruptures. This pipe meets requirements for a special permit with no conditions for manufacture.
2) Pipe coating: The pipe is coated with coal tar enamel – Koppers 70-B primer and hi-melt enamel. If the special permit is granted, TCPL will be required to perform ILI assessments, anomaly repairs, close interval surveys, and stress corrosion cracking direct assessment (SCCDA) along the entire length of the ANR Lateral Loops 1-716 and 2-716 pipeline *special permit inspection area* and *special permit segment* according to the requirements of 49 CFR § 192.929 within one (1) year after the grant of this special permit
3) Depth of cover: TCPL has not conducted a pipeline depth of cover survey, and would be required to conduct a depth of cover survey in the *special permit segment* and implement remediation measures where depth of cover is reduced.

PHMSA has determined that imposing the special permit conditions, if granted, would address these concerns and provide equivalent safety for these areas.

Operational Integrity Compliance:

PHMSA reviewed this special permit request to ensure that integrity threats to the pipeline in the *special permit segment* and *special permit area* are in the operator's operations and management plan (O&M Plan) to provide a systematic program to review and remediate the pipeline for safety concerns. Additional operational integrity review and remediation requirements will be required for this *special permit segment* class location change, if a special permit is granted. The pipeline operational integrity requirements are to ensure that the operator has an ongoing program to locate and remediate safety threats. These threats to integrity and safety include pipe coating quality, cathodic protection effectiveness, operations damage prevention program for third party damage, weld seam and girth weld integrity, anomalies in the pipe steel, and material and structures either along or near the pipeline that could cause the cathodic protection system to be ineffective. PHMSA carefully designs a comprehensive set of conditions that an operator would be required to meet in order for the special permit to be granted. Among other things, the proposed conditions would include:

- A close interval survey to determine the effectiveness of the cathodic protection system must be performed within the *special permit inspection area* and all areas with inadequate cathodic protection must be remediated.
- A coating survey to determine the quality of the pipe coating must be conducted and in-effective coating areas must be required to be remediated.
- Stress corrosion cracking (SCC) surveys on the pipeline will be required to ensure that the pipe steel does not contain cracks due to the effects of high and near neutral pH SCC.
- The latest methods of damage prevention must be incorporated by the operator, such as the best practices of the Common Ground Alliance (CGA) within the *special permit inspection area.*
- Interference currents from electric transmission lines and other interfering structures in the *special permit inspection area* must be identified, controlled and mitigated by conducting surveys and installing grounding systems where required.

- An analysis of pipeline field coated girth welds that could have shielding coatings that could cause corrosion of the pipe steel must be undertaken in the *special permit segment* and in-line inspection logs that indicate 30% corrosion indications on shielding or unknown coatings must be exposed and evaluated.
- Anomalies and dents in the pipeline must be repaired, based upon the special permit repair criteria.
- Girth welds in the special permit segments must have been inspected to a non destructive test plan during construction, or a quality review and remediation program must be implemented by the pipeline operator.
- All shorted casing at road crossings and railroad crossings in the special permit segments (either metallic or electrolytic) must be cleared to prevent corrosion.
- Pipeline longitudinal seams within the *special permit inspection area* must have an engineering analysis to determine if there are any threats and remediated, if integrity threats are determined.
- Periodic close interval surveys and in-line inspection surveys (pipeline internal surveys to determine corrosion in the pipeline) must be performed on the *special permit segment* at the applicable reassessment intervals.
- In-line tool (ILI) inspections must be conducted through the *special permit segments* and the *special permit inspection area,* and anomaly findings remediated any in accordance with the 49 CFR Part 192, Subpart O, § 192.485, and the conditions of the special permit.
- A depth of cover survey of the *special permit segments* must be conducted. Any pipe in the *special permit segment* that does not meet 49 CFR § 192.327(a) must have additional safety measures implemented in areas with reduced depth of cover.

Compliance History – 2007 through 2011:

A review of PHMSA enforcement actions of ANR from February 22, 2007, through May 24, 2011, shows the following closed enforcement actions against TCPL. During this time interval, TCPL has owned and operated ANR (OPID 405).

- Letters - of Concern or Warning - 4 matters closed
- Notices – of Amendment or of Probable Violation – 1 matters closed
- Collected Civil Penalties - $41,000 collected

This enforcement history reveals a few compliance issues, including pipeline maintenance issues. PHMSA would require TCPL to comply with Special Permit conditions to address these issues.

PHMSA reviewed the existing special permits issued to TGPL to ensure that TCPL is in compliance with the conditions of any existing special permits issued to them. PHMSA found that TGPL was not following all of the special permit conditions on the PNGTS[3] 24-inch mainline pipeline (PHMSA-RSPA-2003-15733) through-out the life of the special permit as follows:

> **Special Permit Condition 5**: Findings, remediation, and documentation – Perform weekly aerial patrols and quarterly ground patrols over the entire 143.8 miles of the 24-inch pipeline. The ground patrols must include leak surveys on all Class 3 portions of the pipeline using appropriate instrumented leak detection equipment.
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> **PHMSA review of compliance documents:**
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> TCPL/PNGTS did not meet the special permit conditions for performing weekly aerial patrols and quarterly ground patrols.
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> - TCPL/PNGTS stopped conducting weekly aerial patrols in July, 2006, through early 2010. Bi-weekly aerial patrols were performed from 2008 through early 2010.. PHMSA was not notified of this special permit modification.
> - TCPL/PNGTS performed quarterly ground patrols until the 4th-quarter of 2004, and annual ground patrols were conducted in 2005, 2006, and 2007. Quarterly ground patrols were resumed in 2008. PHMSA was not notified of this special permit modification.

PHMSA finds that TCPL/PNGTS's lack of diligence in following all of the conditions of the existing special permit to be inconsistent with pipeline safety.

[3] TGPL is operator of the PNGTS Pipeline Company and was issued special permit (PHMSA-RSPA-2003-15733) on March 4, 2004.

Findings:

TCP requested a *special permit* to operate the ANR 30-inch Lateral Loop 2-716, a natural gas transmission pipeline, at the current MAOP where a change in class location has occurred from an original Class 1 location to a Class 3 location. Based on the information submitted by TCPL and PHMSA's analysis of the technical, operational, and existing special permit non-compliance issues on other TGPL operated pipelines, PHMSA finds that granting this special permit to TCPL is inconsistent with pipeline safety.

Completed in Washington DC on: JUN 27 2011

Prepared by: Engineering and Research Division