



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

SEP 17 2010

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

Docket No. PHMSA-2009-0061

Dear Mr. Chittick:

On February 6, 2009, TransCanada Pipeline Limited-American Natural Resources (TCPL-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 TCPL-ANR natural gas transmission pipeline system located in Lucas County, Ohio. 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 this special permit request, which would have allowed TCPL-ANR to continue to operate a segment of the 20-inch Line 515 pipeline in Lucas County, Ohio at its current MAOP of 858 pounds per square inch gauge (psig). The reason for this denial can be found in the Special Permit Analysis and Findings document enclosed with this letter. This document and all other pertinent documents are available for review in Docket No. PHMSA-2009-0061 in the Federal Docket Management System (FDMS) located on the internet at www.Regulations.gov.

PHMSA will grant TCPL-ANR until September 30, 2011, to complete pipe replacements required to comply with the requirements of 49 CFR § 192.611.

My staff would be pleased to discuss this special permit or any other regulatory matter with you. John Gale, Director of Regulations (202-366-4046), may be contacted on regulatory matters and Jeff Gilliam, Director of Engineering (303-888-2587), may be contacted on technical matters specific to this special permit.

Sincerely,

Jeffrey D. Wiese
Associate Administrator for Pipeline Safety

Enclosure:
Special Permit Analysis & Findings

U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
Special Permit Analysis and Findings

Special Permit Information:

Docket Number: PHMSA-2009-0061
Pipeline Operator: TransCanada Pipelines Limited, operator of American Natural Resources Pipeline (TCPL-ANR)
Date Requested: February 6, 2009
Code Section(s): 49 CFR § 192.611

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-American Natural Resources¹ (TCPL-ANR), to discuss any relevant public comments received with respect to the application, to present the engineering and 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* on the TCPL-ANR 20-inch Line 515, a natural gas transmission pipeline, where changes have occurred from an original Class 1 location to a Class 3² location in Lucas County, Ohio. If granted, a special permit would allow TCPL-ANR to continue to operate the 20-inch Line 515 at its current maximum allowable operating pressure (MAOP) of 858 pounds per square inch gauge (psig).

¹ American Natural Resources is owned and operated by TransCanada Pipelines Limited.

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

TCPL-ANR's special permit request applies to the *special permit segment* defined using the TCPL-ANR Survey Station Number (including Mile Post) references as follows:

- *Special permit segment* – 20" Line 515 – approximately 3,368 feet in length located in Lucas County, Ohio, downstream of Valve 1 from Survey Station Number 430+69 to Survey Station Number 464+37 (Milepost 23.83 to 24.47).

Special Permit Request

On February 6, 2009, TCPL-ANR submitted an application to PHMSA, for a special permit seeking relief from the Federal pipeline safety regulations in 49 CFR § 192.611(a) for the above listed segment. The Federal pipeline safety regulations in 49 CFR § 192.611 require natural gas pipeline operators to confirm or revise the MAOP of a pipeline segment after a change in class location. A special permit would allow TCPL-ANR to continue to operate the *special permit segment* at its existing MAOP despite a change in class location. If the special permit application is denied, TCPL-ANR would have to reduce pipeline pressure or replace the subject pipe.

Public Notice:

On April 28, 2009, PHMSA posted a notice of this special permit request in the Federal Register (74 FR 19264). PHMSA did not receive any comments for or against this special permit request as a result of this notice. The request letter, Federal Register notice, and all other pertinent documents are available for review in Docket No. PHMSA-2009-0061 in the Federal Docket Management System (FDMS) located on the internet at www.Regulations.gov.

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 segment 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-ANR special permit request.

- 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 TCPL-ANR pipeline where a class location change has occurred from a Class 1 to Class 3 location. TCPL-ANR meets this requirement.
- 2) No bare pipe will be considered. This TCPL-ANR *special permit segment* is coated with fusion bonded epoxy (FBE) coating. TCPL-ANR has met this requirement.
- 3) No pipe containing wrinkle bends will be considered. There are no wrinkle bends in the *special permit segment*. TCPL-ANR 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-ANR 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 the specified minimum yield strength (SMYS). TCPL-ANR records submitted show that the sections of the Line 515 containing the *special permit segment* have been hydrostatically tested to 1293 psig, which is 1.51 x MAOP and 99% of SMYS. TCPL-ANR 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 2005, with no immediately actionable anomalies found. TCPL-ANR would be required to run future ILI tools, if this special permit is granted.
- 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-ANR's integrity management program and periodically

inspected with an in-line inspection technique. If granted, a special permit would be contingent upon TCPL-ANR's incorporation of the *special permit segment* in its written integrity management program as a "*covered segment*" in a "*high consequence area*" (HCA) in accordance with 49 CFR § 192.903.

Criteria Matrix and Operational Integrity Compliance:

As part of its review of TCPL-ANR's application, PHMSA evaluated the relevant regulatory compliance and enforcement history to determine the overall fitness of TCPL-ANR to receive a special permit. The *special permit segment* meets most of the threshold requirements; however a review of pipe material shows the following integrity issues:

- The 20-inch Line 515 pipeline consists of American Petroleum Institute Specification 5LX, *Specification for Line Pipe* (API 5LX), electric resistance welded (ERW), X-52 steel pipe manufactured by American Steel. TCPL-ANR has not provided mechanical and chemical properties reports (mill test reports) for the pipe in the *special permit segment* to document pipe strength for the pipeline operating pressure.

Prior to granting a special permit for a class location change, PHMSA requires operators to submit pipe strength documentation for Class 1 to Class 3 location upgrades. This documentation is necessary to confirm the pipe strength for usage in operating pressure determination and anomaly repair safe pressure calculations. This pipeline segment was constructed in 1991 and TCPL-ANR must maintain this critical pipe strength documentation to determine maximum allowable operating pressure (MAOP) in accordance with 49 CFR §§ 192.105 and 192.611.

Compliance History – 2000 through 2009:

A review of PHMSA enforcement actions for the TCPL-ANR pipeline system from 2000 through 2009, shows the following enforcement actions against TCPL-ANR, which are in the "possible acceptance justification category".

- Letters - of Concern or Warning - 8 matters
- Notices – of Amendment or of Probable Violation – 4 matters

- Collected Civil Penalties - \$51,000 collected, additional penalties have been proposed

TransCanada Pipelines Limited has operated the ANR pipeline system since February 22, 2007. The 10-year enforcement history of the ANR system reveals only a few compliance issues.

Given TCPL-ANR's lack of pipe mechanical and chemical properties reports to confirm the strength of the pipe in the *special permit segment*, issuance of a special permit would not be consistent with pipeline safety nor would it be in the public interest.

Findings:

For the reasons discussed above and having reviewed TCPL-ANR's application, analyzed the technical and safety issues involved, and the relevant operating and compliance history, PHMSA recommends that the special permit requested by TCPL-ANR for one segment of Line 515 in Lucas County, Ohio, be denied.

Completed in Washington DC on: SEP 17 2010

Prepared by: Engineering and Emergency Response