



U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety
Administration

1200 New Jersey Avenue, SE
Washington, D.C. 20590

JUL 2 2010

Ms. Mary L. McDaniel, P.E.
Director, Pipeline Safety Division
Railroad Commission of Texas
1701 North Congress Avenue
Austin, TX 78711-2967

Dear Ms. McDaniel:

Pursuant to 49 U.S.C § 60118(d), the Pipeline and Hazardous Materials Safety Administration (PHMSA) reviewed your letter of April 27, 2010, notifying us that the Railroad Commission of Texas (Commission), Safety Division, approved, pending PHMSA's acceptance, a state waiver to Monument Pipeline (Monument) granting modification of compliance with 49 CFR Part 192 as adopted by Texas pursuant to Rule 8.1 of Title 16, Texas Administrative Code. The waiver would allow for installation of composite thermoplastic pipe (Smart Pipe[®]) for a natural gas application. The code sections involved are §§ 192.53, 192.121, 192.123 and 192.619(a).

Section 192.53(c) requires that materials for pipe must be "Qualified in accordance with the applicable requirements of this Subpart." Composite, reinforced thermoplastic pipe (RTP) is not addressed in Part 192. Therefore, permeation rates, torsional fatigue of the wrap, and cyclic fatigue of the composite materials are not addressed. In addition, the design requirements in § 192.121 and the pressure limitations in § 192.123 do not address composite RTP pipe. The design formula in § 192.121 is for plastic material and the § 192.123 pressure limitation of 125 psig for plastic pipe is not applicable to Smart Pipe[®]. Similarly, the pressure testing requirements in § 192.619(a) were designed for steel pipe and plastic pipe, not composite RTP pipe.

In its application to the Commission, Monument stated that if a waiver were granted, it anticipated operating this new application of RTP pipe at much higher pressures than would be the case with monolithic pipe material. Monument's request would allow for the installed Smart Pipe[®] to operate under normal conditions with pipeline pressures between 600 and 800 psig.

Monument asserted that nothing in the regulations restricted the use of other qualified materials. This assertion, however, is not completely accurate. The requirements for pipe materials are detailed in Part 192, Subpart B. Sections 192.55 (Steel) and 192.59 (Plastic) refer to Appendix B to Part 192 for an authorized listing of specifications. Smart Pipe[®] is not authorized in Appendix B to Part 192. The specifications listed in Appendix B are based on industry standards that are highly detailed regarding their manufacture, installation, and operation.

JUL 2 2010

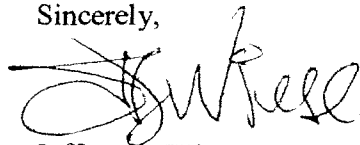
Railroad Commission of Texas -- Monument Pipeline

After a thorough review, PHMSA has concluded that the current record does not contain sufficient information to permit a conclusion that the waiver would not be inconsistent with safety. Accordingly, PHMSA objects to the Commission's grant of a waiver at this time based on inadequate information, in the following areas:

- Information on completed and ongoing field installations of Smart Pipe[®], to date, particularly those involving systems jurisdictional to Parts 192 and 195. Although this waiver request is specific to Part 192, there may be relevant lessons learned from Part 195 specific installations. The Commission should require the applicant to provide available information on prior installations in the U.S. including issues seen during construction, pressure testing, and, if in service, issues seen during operation and maintenance in the line. Any information provided on an issue should include a "lessons learned" document that provides a description of how the issue was mitigated and any changes that would impact the implementation of relevant procedures, process, technology, equipment, training and qualification for future projects.
- Guidance on "Best Practices" on all aspects of construction, operation and maintenance of Smart Pipe[®] in Part 192 or 195 jurisdictional systems based on lessons learned.
- Updated and/or revised construction, operation and maintenance manuals and procedures based on the latest best practices and lessons learned with a revision history describing the reasons for the changes.
- Details on the development or status of an ANSI-certified standard specific to Smart Pipe[®]. The application only states the product is designed and developed in accordance with the API Recommended Practice 15S "Qualification of Spoolable Composite Pipe." Due to the complicated nature and unique characteristics of different composite materials combined with the challenges and potential risks relative to different operating environments, PHMSA believes a standard (not recommended practice) more specific to the product and intended operating environment(s) technically vetted through an ANSI-certified process, is needed.

If the applicant is able to supplement its waiver request with this information demonstrating that the waiver would not be inconsistent with safety, PHMSA will review the matter again should you request that we do so. If you wish to discuss this special permit or any other pipeline safety matter, please call John Gale, Director of Regulations at 202-366-0434, for regulatory matters or Richard Sanders, Director of Training and Qualifications at 405-954-7214 for technical matters.

Sincerely,



Jeffrey D. Wiese

Associate Administrator for Pipeline Safety

VICTOR G. CARRILLO, CHAIRMAN
ELIZABETH A. JONES, COMMISSIONER
MICHAEL L. WILLIAMS, COMMISSIONER



MARY L. MCDANIEL, P.E.
DIVISION DIRECTOR

DAVID L. FLORES
DEPUTY DIRECTOR

RAILROAD COMMISSION OF TEXAS
SAFETY DIVISION
PIPELINE SAFETY

April 26, 2010

APR 27 2010

Jeffrey D. Wiese
Associate Administrator for Pipeline Safety
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
East Building, 2nd Floor
1200 New Jersey Ave., SE
Washington, DC 20590

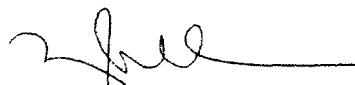
RE: Texas Special Permit/Waiver

Dear Mr. Wiese:

Attached please find a waiver that has been recently approved by our Commissioners for a pilot project involving composite plastic pipe. Monument Pipeline, an intrastate natural gas operator, has requested approval to install two short sections of composite plastic pipe, Smart Pipe, in their system in Texas.

Pursuant to the requirements in the Pipeline Safety Act, we hereby provide this written notification to your offices at least sixty (60) days prior to its effective date. Please consider this communication as the requisite notice, and contact me if there are any questions.

Respectfully,


Mary L. McDaniel, P.E.
Director

Cc: Zach Barrett
Rod Seeley

MICHAEL L. WILLIAMS, *CHAIRMAN*
VICTOR G. CARRILLO, *COMMISSIONER*
ELIZABETH A. JONES, *COMMISSIONER*



LINDIL C. FOWLER, JR., *GENERAL COUNSEL*
COLIN K. LINEBERRY, *DIRECTOR*
HEARINGS SECTION

RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

April 21, 2010

Joe Mills
Director - Operations & Engineering
Monument Pipeline, LP
5847 San Felipe, Ste 1910
Houston TX 77057

APR 27 2010

Re: **GAS SERVICES DOCKET NO. 09868**; APPLICATION OF MONUMENT PIPELINE, L.P. FOR WAIVER OF CFR §§192.53(c), 192.121, 192.123, AND 192.619(A) FOR INSTALLATION OF COMPOSITE THERMOPLASTIC PIPE FOR PILOT INSTALLATION TEST PROJECT AT ITS INTRASTATE NATURAL GAS PIPELINE FACILITY LOCATED IN MISSOURI CITY, TEXAS.; **FINAL ORDER**

To the Parties:

The Railroad Commission of Texas has acted upon the above-referenced case. Please refer to the attached Final Order for the terms and date of such action.

This order will not be final and effective until at least 23 days after the date of this letter. If a Motion for Rehearing is timely filed, this order will not be final and effective until such Motion is overruled. A Motion for Rehearing should state the reasons you believe a rehearing should be granted, including any errors that you believe exist in the Commission's order. If the Motion is granted, the order will be set aside and the case will be subject to further action by the Commission at that time or at a later date.

To be timely, a Motion for Rehearing must be received by the Commission's Docket Services (see letterhead address) no later than 5:00 p.m. on the 20th day after you are notified of the entry of this order. You will be presumed to have been notified of this order three days after the date of this letter. This deadline cannot be extended because it is set by law. Fax transmissions will not be accepted without prior approval from the hearings examiner. **ORIGINAL PLUS THIRTEEN** copies of the Motion for Rehearing shall be submitted to the hearings examiner. **PLEASE DO NOT STAPLE COPIES.** One copy must be sent to each party. **In addition, if practicable, parties are requested to provide the examiners with a copy of the Motion for Rehearing on a diskette in Word or WordPerfect format. The diskette should be labeled with the docket number, the title of the document, and the format of the document.**

Sincerely,

A handwritten signature in black ink, appearing to read "Mark J. Helmueller".

Mark J. Helmueller
Hearing Examiner

MJH/clc

Attachment

cc: ✓ Bill Geise - RRC, Austin
✓ Mary McDaniel - RRC, Austin

RECEIVED
RRC OF TEXAS

APR 22 2010

SAFETY DIVISION
AUSTIN, TEXAS

**RAILROAD COMMISSION OF TEXAS
OFFICE OF GENERAL COUNSEL
HEARINGS SECTION**

Gas Utilities Docket No. 09868

**APPLICATION OF MONUMENT PIPELINE, L.P. FOR
WAIVER OF CFR §§192.53(C), 192.121, 192.123, AND
192.619(A) FOR INSTALLATION OF COMPOSITE
THERMOPLASTIC PIPE FOR A PILOT INSTALLATION
TEST PROJECT AT ITS INTRASTATE NATURAL GAS
PIPELINE FACILITY LOCATED IN MISSOURI CITY,
TEXAS.**

FINAL ORDER

The Commission finds that after statutory notice in the above-numbered docket that the proposed application is in compliance with all statutory and rule requirements and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas. After review and due consideration of the Staff Report and Recommendation, the Commission hereby adopts the following findings of fact and conclusions of law.

FINDINGS OF FACT

1. On April 14, 2009, Monument Pipeline, L.P. ("Monument"), filed this application for a waiver of CFR §§192.53(c), 192.121, 192.123, and 192.619(a) to allow it to install Smart Pipe®, a composite thermoplastic pipe for a pilot installation test project at its intrastate natural gas pipeline facility located in Missouri City, Texas.
2. Notice of the application was provided by certified mail, return receipt requested to all affected persons entitled to notice pursuant to Pipeline Safety Rule 8.125(e)(1).
3. Notice of application was published in compliance with Pipeline Safety Rule 8.125(e)(2) in the *Houston Chronicle*, a newspaper of general circulation in Harris County on February 5 and 12, 2010.
4. No protests were filed in response to the notice of application.
5. On January 11, 2010, the Commission's Pipeline Safety Division, filed a memorandum recommending approval of Monument's waiver application.

6. In this pilot project, Monument proposes to install two approximately 20 foot segments of Smart Pipe® in series at its intrastate natural gas pipeline facility in Missouri City, Texas.
 - a. Smart Pipe® is a composite thermoplastic pipe composed of two layers of high-density polyethylene reinforced with continuous fiber webbing between the two layers.
 - b. One segment will be installed as a tight fit liner inside a 12" nominal diameter steel pipe.
 - c. One segment will be installed independent of the 12" steel pipe and will be exposed to the usual environmental and atmospheric elements.
7. A special permit is required because this pilot project will be installed as an appendage to an existing jurisdictional pipeline system. All other applicable rules and regulations must be met in the design and installation of this pilot project.
8. Total flow rate and operating pressure will be periodically monitored and documented with existing instrumentation.
9. A bucket type strainer is installed downstream of the test segments with a strainer sieve or basket sized to capture any small particles or slivers of the inter-core pipe surface from blisters or another anomalies which occur during operation or de-pressuring exercises.
10. Monument will provide detail specifications and quality control for the material makeup of the composite thermoplastic pipe.
11. For the tight fit liner segment, Monument will record a description of the host 12" steel pipe details including, but not limited to any anomalies, wall thickness, and pressure rating.
12. Prior to installation the segments of composite thermoplastic pipe installed for the pilot project will be pressure tested for their designed pressure under the manufacturer's recommended method. All documentation and records will be made available to TRRC personnel.
13. Monument will use fiber optic monitoring of both segments during the entire operation of this pilot project.
14. Both segments will be operated under actual flow conditions for a minimum of 6 months.

15. Both segments will be installed to operate under normal conditions with pipeline pressures between 600 and 800 psig. At various times during the 6 months, each segment will be depressured as a means to ensure the integrity of the Smart Pipe® segments under these conditions.
16. The gas product is considered dry gas with a general composition of possible permeable gases, by percent volume are defined as follows:
 - CO₂ ≤ 2%
 - N₂ ≤ 3%
 - H₂S ≤ 4 PPM
17. Carbon Steel ANSI 900 series flanged ends will be installed to make all necessary connections of the project installation.
18. Block valves will be installed so that the pilot project loop can be isolated as necessary from the permanent pipeline system to which this pilot project is attached.
19. Monument will provide a written qualified weld procedure with destructive testing results of all welds made to facilitate this installation.
 - a. Monument will include documentation of the qualification of the welder(s) used to make all welds to facilitate this installation.
 - b. Monument will make available material testing reports for review by TRRC personnel prior to operating the pilot project loop.
20. Appropriate Monument and/or Smart Pipe® personnel will be on site at all times during the installation and making of all connections to ensure proper installation procedures are followed. Monument and/or Smart Pipe® personnel will be made available in order to exercise appropriate oversight of the entire installation and start-up processes.
21. Monument will provide certifications or other documented proof that all construction personnel involved during all phases of installation and inspection of the Smart Pipe® pilot project were trained in accordance with all necessary Monument project installation processes and procedures.
22. Monument will pressure test the two segments to the same MAOP as the jurisdictional piping to which the segments are attached. Pressure testing will be conducted in accordance with 49 CFR §§ 192.505 and 192.619(a)(2)(i).
23. Before this pipeline is put into operation a written additions to Monument's operations and maintenance process and procedure pertinent to Smart Pipe® will be provided to, and approved by TRRC personnel.

24. Because the carbon steel 12" pipe will hold any permeable gases that may have permeated the Smart Pipe® and since this annulus will be continuous through the segment installed as a tight fit liner, a process and procedure will be written to have each end of this segment periodically sniffed for possible gases that may have permeated through the core liner and into the annulus.
25. At a minimum, a written process and procedure will be added to Monument's existing operation and maintenance manual that will specify an interval of the sniffing inspection. This process and procedure will require documentation of what gases are identified, if any, and what specific quantitative values would initiate further inspection measures, what those inspection measures would consist of, and what actions would be required. These results will be compared to the product's composition that is being transported and the operating parameters of the pipeline at the time these samples are taken. Also included within the written processes and procedures will be an inclusion that this pipeline will be patrolled or leak surveyed on a weekly basis.

CONCLUSIONS OF LAW

1. The Commission has original jurisdiction to consider Applicant's application pursuant to TEX. UTIL. CODE ANN. §121.201 and 49 U.S.C. §60105.
2. Proper legal notice was timely given to all persons and entities entitled to notice under applicable statutes and rules.
3. All things have occurred and have been accomplished to give the Commission jurisdiction in this case. The Commission has jurisdiction under statutes and rules, including 49 CFR 192.53, 55, 105, 107, 109, 111, 113, 221, 455, 503(b) and 619, to authorize the requested special permit and use of pipe not manufactured in accordance with a listed specification in those rules.
4. Applicant is required to comply with all other minimum safety standards set forth in 49 C.F.R. Part 192 as they apply to normal operation and maintenance.
5. Granting the requested special permit is not inconsistent with pipeline safety.

ORDERING PROVISIONS

Therefore, **IT IS ORDERED** by the Railroad Commission of Texas that the application of Cinco Natural Resources Corporation, for a waiver of CFR §§192.53(c), 192.121, 192.123, and 192.619(a) to allow it to install Smart Pipe®, a composite thermoplastic pipe, for a pilot installation test project at its intrastate natural gas pipeline facility located in Missouri City, Texas be **GRANTED**. No further waivers for installation within any system or pipeline are granted.

All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

UPON THE PASSAGE of sixty (60) days from the date this order is signed and no objection from the Secretary of Transportation having been received as provided for in 49 U.S.C. §60118(c)(1), this order shall become final and effective.

Done this 20th day of April, 2010, in Austin, Texas.

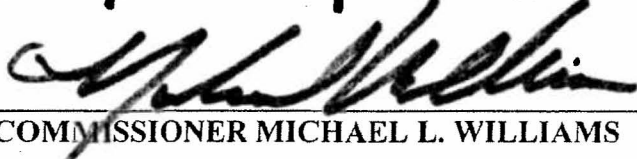
RAILROAD COMMISSION OF TEXAS



CHAIRMAN VICTOR G. CARRILLO

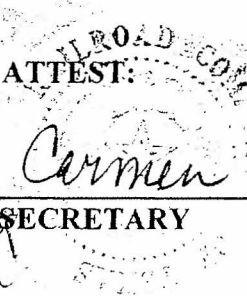



COMMISSIONER ELIZABETH A. JONES



COMMISSIONER MICHAEL L. WILLIAMS

ATTEST:

Deputy SECRETARY