



Pipeline and Hazardous Materials Safety Administration

APR 2 1 2010

Ms. Mary L. McDaniel, P.E. Director, Safety Division Railroad Commission of Texas 1701 North Congress Avenue Post Office Box 12967 Austin, Texas 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 February 10, 2010, notifying us that the Railroad Commission of Texas, Safety Division (Commission) approved, pending PHMSA's acceptance, a state waiver to Cinco Natural Resources Corporation (Cinco), 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 the installation of a composite type pipeline (FlexSteelTM) for Cinco's Gas Gathering Pipeline System, ST345-2 Pipeline, located in Corpus Christi Bay, Nueces County, Texas. The code sections involved are 49 CFR §§ 192.53, 192.55, 192.105, 192.107, 192.109, 192.111, 192.113, 192.221, 192.455, 192.503(b)(3), and 192.619.

The ST345-2 is an abandoned 6-inch gas pipeline, through which Cinco inserted approximately 7,062 feet of 3-inch FlexSteelTM pipe during December, 2008. On August 6, 2009, Cinco filed its application for the waiver with the Commission and the line is not yet operative. The Commission's grant of the waiver would be conditioned on certain actions to be taken by Cinco. These conditions include special application provisions, the establishment of written procedures and record keeping requirements, and additional testing, operating and maintenance requirements. Additional details of the final order are available on the Commission Gas Services Docket No. 09903.

Given the conditions imposed by the Commission in its Order, PHMSA does not object to the Commission's grant of the waiver, providing these additional conditions are met:

- 1. Prior to operation, the operator must provide the Commission with details on the following for its review:
 - Specific material data and specifications for the composite pipe used in this
 application, including detailed schematics of the layers and dimensions of OD,
 ID, and other necessary dimensions;
 - o Design specifications and criteria;
 - o Calculations of maximum tensile loads given specific materials used;
 - A description of the process and calculations used to establish MAOP consistent with 49 CFR Part 192; and
 - A detailed comparison/correlation of the established MAOP with the SMYS levels of the composite pipe.

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- 2. The operator must provide records showing the FlexSteelTM pipe was factory tested to a minimum of 1.625 x MAOP for 8 continuous hours.
- 3. The operator must provide records showing manufacturer personnel and/or a certified QA/QC inspector were onsite at all times during installation of all connections, flanges, and the pulling of the FlexSteel™ pipe into the existing pipeline to ensure that proper technical evaluation of installation procedures were conducted.
- 4. The operator must provide an installation report detailing any issues that arose during installation that may have compromised the integrity of the pipe and how it was addressed.
- 5. If the above information and records, as well as those required through the Commission's final order are not provided by the operator, or the Commission determines that the information provided is inadequate, the operator must follow any additional mitigative measures determined by the Commission, up to and including removing and replacing the pipe with new FlexSteelTM pipe or pipe currently approved by 49 CFR Part 192.
- 6. No additional construction or testing work is to take place without the Commission's personnel being onsite, unless approved in advance by the Commission.
- 7. Prior to placing the pipe in service, the FlexSteelTM pipe, connections and flanges must be field hydrostatically tested at 1.5 times (or 150%) of MAOP for a minimum of 24 hours with a recording chart, the results of which must be presented to the Commission for review.
- 8. If the pipe integrity is ever found to be deficient, poses a risk to the public, or fails, the operator must inform the Commission immediately, and employ the necessary mitigative measures to ensure safety up to and including the replacement with pipe currently approved by 49 CFR Part 192.

If you wish to discuss this response or any other pipeline safety matter, my staff would be pleased to assist you. Please call John Gale, Director of Regulations (202-366-0434), for regulatory matters or Richard Sanders, Director of Training and Qualifications, at (405-954-7214) on technical matters. Thank you for your participation and cooperation in the state waiver concurrence process.

Sincerely,

Jeffrey D. Wiese

Associate Administrator for Pipeline Safety

RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL HEARINGS SECTION

GAS SERVICES DOCKET NO. 09903

APPLICATION OF CINCO NATURAL RESOURCES CORPORATION FOR WAIVER PURSUANT TO 49 CFR 192 FOR INSTALLATION OF "FLEXSTEEL" PIPELINE FOR THEIR GAS GATHERING PIPELINE SYSTEM, ST345-2 PIPELINE, LOCATED IN CORPUS CHRISTI BAY, NUECES COUNTY, 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. Cinco Natural Resources ("Cinco") owns an abandoned 6-inch gas pipeline (ST345-2) in the bay waters of Corpus Christi Bay, Nueces County, Texas. The ST345-2 pipeline originates at a platform in State Tract 345 and terminates at another platform in the adjacent State Tract 348.
- 2. Cinco installed approximately 7,062 feet of 3" FlexSteel™ pipe within the existing 6" carbon steel pipeline along the route shown on the map attached as *Appendix A* located in Corpus Christi Bay of Nueces County, Texas during December 2008.
- 2. On August 6, 2009, Cinco filed this application for a waiver under Pipeline Safety Rule 8.1 to validate its previously installation of approximately 7062 feet of 3-inch plastic FlexSteel™ pipe through the existing abandoned 6" carbon steel pipeline.
- 3. 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).
- 4. Notice of application was published in compliance with Pipeline Safety Rule 8.125(e)(2) in the *Ingleside Index*, a newspaper of general circulation in San Patricio County on September 9 and 16, 2009.
- 5. This existing 6" carbon steel gas gathering pipeline's greatest integrity risk or threat has not yet been determined, however an inhibitor injection facility and a pigging program will be put in place should any threat for internal corrosion or buildup of paraffin ever exist or develop in the 3" FlexSteelTM pipeline.

6. The gas product is considered dry gas having occasional liquids or condensates that are removed onshore at a facility prior to the onshore compressor station suction. The general composition of possible permeable gases, by percent volume are defined as follows:

 $CO_2 \le 2\%$ $N_2 \le 0.1\%$ $H_2S \le 10 \text{ PPM}$

- 7. Two stainless steel connectors were welded to join the ends of two joints of FlexSteelTM pipe. The connectors or joints were not the continuous type used for the 6" installation, since continuous connectors are not available for the 3" FlexSteelTM plastic pipe.
- 8. Although the field joints were coated as the previous installation, centralizers were not installed at each joint, as required during the 6" installation to support and locate the FlexSteelTM joints in the center of the existing 12-inch annulus, keeping the metallic joints from coming into contact with the 12-inch.
- 9. Cinco will provide a written qualified weld procedure with the destructive testing results of the welds made for the two connections and a documented qualification of the welder, or welders used to make these welds. Cinco will provide documentation, or other means of verification that WellstreamTM and FlexSteelTM certified personnel were on site at all times during the installation, the making of all connections and pulling of the 3" FlexSteelTM pipe into the existing 6" pipeline to ensue proper installation procedures were followed and appropriate oversight (inspection) of the entire installation process took place.
- 10. Cinco will provide documented records showing that the FlexSteel[™] pipe was not pulled beyond the manufactures' recommended maximum spooling and installation tensions for the 3" pipe at anytime during the installation.
- 11. Cinco will provide certifications, or other documented proof all construction personnel involved during all phases of installation and inspection of the 3" FlexSteelTM pipe were trained in accordance with all necessary Cinco project and WellstreamTM installation processes and procedures.
- 12. Cinco will have documented records that a minimum of 100 feet of the 3" FlexSteelTM pulled beyond its final destination for visual inspection. The records should indicate an examination was performed by a certified FlexSteelTM technician for any possible damage that may have occurred during the pulling of the 3" through the 6". If any compromising damage had occurred during the pulling process, the records should indicate the cause of damage and how the cause was alleviated to the satisfaction that the FlexSteelTM 3"to be put in operation is not in any way compromised.

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- 13. Cinco will pressure test the installation in accordance with CFR 49 Part 192 Subpart "J" (more specifically §§192.505 and 192.619(a)(2)(ii)), while monitoring and periodically documenting the pressure of the continuous annulus between the two layers of polyethylene that makes up the internal liner and the outer coating during the pressure test.
- 14. Cinco will operate this 3" FlexSteelTM pipeline initially at pressures no greater than 250 psig until it is proven through periodical testing for permeable gases between the polyethylene layers has not occurred and TRRC has given approval to so.
- 15. Cinco will ensure that the steel tensile armor layers in the annulus of the two polyethylene layer is electrically continuous from platform to platform, and is not electrically shorted to the existing 6" carbon steel pipe.
- 16. Cinco will take necessary measures to ensure that should any coating damage occur to the field joints or any areas of the steel tensile armor layer that the areas are cathodically protected with full attention paid to §§ 192.455, 192.459, 192.461, 192.463, 192.465, 192.467 and for protection against internal corrosion §192.475.
- 17. Cinco will ensure that the annulus between the two polyethylene layers is continuous to the stainless steel connection at the center of the 3" FlexSteel™ pipeline by applying positive pressure maintained for a minimum of 8 hours. This test will be performed at each terminus periodically to ensure the integrity of the internal liner and the outer coating.
- 18. Before this pipeline is put into operation a written operations and maintenance process and procedure pertinent to FlexSteelTM will be provided to, and approved by TRRC personnel.
- 19. A process and procedure will be written to have each end periodically sniffed for possible gases that may have permeated through the core liner and into the annulus.
- 20. At a minimum, a written process and procedure will be added to Cinco'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 as was required of the FlexSteelTM 6" installation.

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. The application for this special permit was not filed to avoid the expense of safety compliance, or to correct an existing violation.
- 6. Granting the requested special permit is not inconsistent with pipeline safety.

Therefore, IT IS ORDERED by the Railroad Commission of Texas that the application of Cinco Natural Resources Corporation, for a waiver pursuant to 49 CFR 192 for installation of "FlexSteel" Pipeline for their Gas Gathering Pipeline System, ST345-2 Pipeline, located in Corpus Christi Bay, Nueces County, Texas be GRANTED ONLY as to the insertion of the 3-inch FlexSteel liner into the existing 6-inch pipeline at the location specified subject to the special provisions outlined below. No further waivers for installation within any system or pipeline are granted.

Special Provisions

- 1. Cinco is required to submit annual reports to the Commission regarding any leaks or problems associated with the operation of this pipeline. Should any unforeseen problems occur, the Commission may request the removal and/or replacement of the approved composite pipe.
- 2. Cinco is required to prepare a process and procedure to have each end of the annulus created by the installation of the 3-inch pipeline periodically sniffed for possible gases that may have permeated through the core liner and into the annulus.
 - A. The process and procedure will specify an interval of the sniffing inspection.

- B. The process and procedure will require documentation of what gases are identified, what specific quantitative values would initiate further inspection measures, what inspection measures would consist of, and what actions would be required.
- 3. The current existing cathodic protection system and inhibitor injection and pigging program shall continue until it is determined beyond any doubt that they are no longer needed to protect the exterior or interior surfaces of the existing pipeline and the stainless steel joint fittings of the new installation.

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 9th day of February, 2010, in Austin, Texas.

RAILROAD COMMISSION OF TEXAS

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COMMISSIONER ELIZABETH A. JONES

OR G. CARRILLO

COMMISSIONER MICHAEL L. WILLIAMS

ATTEST:

SECRETARY