



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 27, 2007

Mr. Dan Knepper
VP Energy Operations
CHS Inc.
803 Highway 212 South
Laurel, MT 59044

CPF 5-2007-5035M -

Dear Mr. Knepper:

On April 17 through April 19, 2007, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected CHS procedures for operation and maintenance in Laurel, Montana.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within CHS plans or procedures, as described below:

1. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
 - (c) **Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:**
 - (3) **Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.**

And

§195.422 Pipeline Repairs.

(a) Each operator shall, in repairing its pipeline systems, ensure that the repairs are made in a safe manner and are made so as to prevent damage to persons or property.

The following procedures were inadequate to address testing of pipeline repairs:

1.a. §195.302 General requirements.

(b) Except for pipelines converted under §195.5, the following pipelines may be operated without pressure testing under this subpart:

(1) Any hazardous liquid pipeline whose maximum operating pressure is established under §195.406(a)(5) that is-

- (i) An interstate pipeline constructed before January 8, 1971;**
- (ii) An interstate offshore gathering line constructed before August 1, 1977;**
- (iii) An intrastate pipeline constructed before October 21, 1985; or**
- (iv) A low-stress pipeline constructed before August 11, 1994, that transports HVL.**

(2) Any carbon dioxide pipeline constructed before July 12, 1991, that-

- (i) Has its maximum operating pressure established under §195.406(a)(5); or**
- (ii) Is located in a rural area as part of a production field distribution system.**

(3) Any low-stress pipeline constructed before August 11, 1994, that does not transport HVL.

(4) Those portions of older hazardous liquid and carbon dioxide pipelines for which an operator has elected the risk-based alternative under Sec. 195.303 and which are not required to be tested based on the risk-based criteria.195.302(b), Except for lines converted under '195.5, certain lines listed under this section may be operated without having been pressure tested per Subpart E.

Cenex's O&M manual Section I DESIGN, CONSTRUCTION AND REPAIR, Hydrostatic Testing chapter, General Requirements does not describe any pipeline attributes that would preclude a pipeline from needing a pressure test. Instead the procedure references Part 195 for exemption guidance.

An operator's pressure test procedure must list the parameters that would preclude a pipeline from needing a pressure test to be in compliance with Part 195. An operator cannot simply refer to Part 195 for guidance.

1.b. §195.306 Test medium.

(a) Except as provided in paragraph (b), (c), and (d) of this section, water must be used as the test medium.

(b) Except for offshore pipelines, liquid petroleum that does not vaporize rapidly may be used as the test medium if-

- (1) The entire pipeline under test is outside of cities and other populated areas;**
 - (2) Each building within 300 feet (91 meters) of the test section is unoccupied while the test pressure is equal to or greater than a pressure which produces a hoop stress of 50 percent of specified minimum yield strength;**
 - (3) The test section is kept under surveillance by regular patrols during the test;**
- and,**

- (4) Continuous communication is maintained along entire test section.**
- (c) Carbon dioxide pipelines may use inert gas or carbon dioxide as the test medium if-**
 - (1) The entire pipeline section under test is outside of cities and other populated areas;**
 - (2) Each building within 300 feet (91 meters) of the test section is unoccupied while the test pressure is equal to or greater than a pressure that produces a hoop stress of 50 percent of specified minimum yield strength;**
 - (3) The maximum hoop stress during the test does not exceed 80 percent of specified minimum yield strength;**
 - (4) Continuous communication is maintained along entire test section; and,**
 - (5) The pipe involved is new pipe having a longitudinal joint factor of 1.00.**
 - (d) Air on inert gas may be used as the test medium in low-stress pipelines.**

Cenex's O&M manual Section I DESIGN, CONSTRUCTION AND REPAIR, Hydrostatic Testing chapter, Test Medium does not describe acceptable hydrostatic test mediums. Instead the procedure references Part 195 for acceptable hydrostatic test mediums.

An operator's pressure test procedure must either list acceptable hydrostatic test mediums or refer to an industry standard that contains acceptable hydrostatic test mediums that will ensure a pressure test is in compliance with Part 195. An operator cannot simply refer to Part 195 for guidance.

1.c. §195.310 Records.

- (b) The record required by paragraph (a) of this section must include:**
 - (10) Temperature of the test medium or pipe during the test period**

Cenex's hydrostatic testing procedures do not require a record be kept of test medium temperatures during a pressure test.

An operator's pressure testing procedure must require that an operator keep a record of the test medium used for the pressure test.

2. §195.402 Procedural manual for operations, maintenance, and emergencies.

- (c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:**
 - (3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.**

The procedures for installing and repairing valves, fittings, and scraper/sphere facilities were inadequate. In addition, multiple sections of the O&M procedures were deficient with respect to security, damage prevention, and corrosion control. Details of the inadequacies are presented below:

2.a. §195.422 Pipeline Repairs.

(b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.

Cenex's procedure under Section I PIPELINE REPAIRS, Responsibility and Purpose chapter does not describe or reference an industry standard for requirements of pipe, valves and fittings to ensure compliance with Part 195. Instead the procedure references Part 195 for pipe, valve, and fitting requirements.

An operator's procedure must either list acceptable pipe, valve, and fitting requirements or refer to an industry standard that contains acceptable pipe, valve, and fitting requirements that will ensure pipe, valves, and fittings used in their pipeline are in compliance with Part 195. An operator cannot simply refer to Part 195 for guidance.

2.b. §195.426 Scraper and sphere facilities.

No operator may use a launcher or receiver that is not equipped with a relief device capable of safely relieving pressure in the barrel before insertion or removal of scrapers or spheres. The operator must use a suitable device to indicate that pressure has been relieved in the barrel or must provide a means to prevent insertion or removal of scrapers or spheres if pressure has not been relieved in the barrel.

Cenex's O&M procedures do not describe the requirements for a scraper and sphere facility.

A scraper or sphere facility must be equipped with a relief device capable of safely relieving pressure in the barrel before insertion or removal of scrapers or spheres, and must have a suitable device to indicate that pressure has been relieved in the barrel, or there must be a means to prevent insertion or removal of scrapers if the pressure has not been relieved in the barrel. These requirements must be contained within the operator's scraper or sphere facility procedure or the procedure must refer to an industry standard that contains these requirements.

2.c. §195.436 Security of facilities.

Each operator shall provide protection for each pumping station and breakout tank area and other exposed facility (such as scraper traps) from vandalism and unauthorized entry.

Cenex's O&M Manual Section C SIGNS AND SECURITY, Security Of Facilities chapter, states "Protection from vandalism and unauthorized entry will be provided for each breakout tank area, pump station, exposed scraper trap and other exposed facilities (per 49 CFR Section 195.436), unless due to other factors such as the remoteness of the location it is not deemed necessary."

Section 195.436 requires protection for facilities from vandalism and unauthorized entry regardless of a facility's remoteness therefore an operator's procedure cannot simply state

that protection for vandalism and unauthorized entry is not required if the facility is in a remote location.

2.d. §195.442 Damage Prevention Program

(c) The damage prevention program required by paragraph (a) of this section must, at a minimum:

(2) Provides for notification of the public in the vicinity of the pipeline and actual notification of persons identified in paragraph (c)(1) of this section of the following as often as needed to make them aware of the damage prevention program:

Cenex's O&M manual Section D, DAMAGE PREVENTION PROGRAM, states "One of the major goals of the "One-Call" program is to encourage requests for pipeline locations in construction areas". Section D however does not include or reference methods to be used by Cenex to achieve this goal.

An operator's damage prevention program procedure must include or reference methods that will be used to ensure that the public who are in the vicinity of the operator's pipeline are notified of the proximity of the pipeline, the damage prevention program, and precautions to be taken when excavating. Additionally the damage prevention program procedure must describe or reference actual notification methods to be used to inform individuals involved in excavation activities in the area of the operator's pipeline. These notifications must include information about the operator's damage prevention program and steps that must be taken when excavating.

2.e. §195.442 Damage Prevention Program

(c) The damage prevention program required by paragraph (a) of this section must, at a minimum:

(4) If the operator has buried pipelines in the area of excavation activity, provide for actual notification of persons who give notice of their intent to excavate of the type of temporary markings to be provided and how to identify the markings.

(5) Provide for temporary marking of buried pipelines in the area of excavation activity before, as far as practical, the activity begins.

Cenex explained the process they use for receiving, recording, notifying, and temporary marking activities used during pipeline locating. This process however is not a written procedure in any of Cenex's manuals.

An operator's damage prevention program must provide or reference instructions to pipeline personnel who 1) receive notices of the intention to excavate, 2) notify those who have given notice to excavate, 3) locate and/or mark the operator's pipeline in response to notices to excavate, 4) record of all activities involved in response to a notice to excavate.

2.f. §195.563 Which pipelines must have cathodic protection?

(b) Each buried or submerged pipeline converted under Sec. 195.5 must have cathodic protection if the pipeline--

- (1) Has cathodic protection that substantially meets Sec. 195.571 before the pipeline is placed in service; or**
- (2) Is a segment that is relocated, replaced, or substantially altered.**

Cenex's O&M manual Section H. CORROSION CONTROL, Cathodic Protection chapter does not address converted pipelines that had effective cathodic protection prior to conversion or when the converted pipeline is a segment that has been relocated, replaced, or substantially altered.

An operator's procedure must include or reference a requirement for a pipeline that is converted to service. That requirement must state that if the pipeline had adequate cathodic protection meeting the requirements of Sec. 195.571 prior to conversion to service then after the conversion to service has occurred that pipeline must maintain its cathodic protection. Additionally the operators procedure must require that if a converted segment is relocated, replaced or substantially altered that segment must then have cathodic protection applied to it.

- 2.g. §195.589 What corrosion control information do I have to maintain?**
 - (c) You must maintain a record of each analysis, check, demonstration, examination, inspection, investigation, review, survey, and test required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that corrosion requiring control measures does not exist. You must retain these records for at least 5 years, except that records related to Secs. 195.569, 195.573(a) and (b), and 195.579(b)(3) and (c) must be retained for as long as the pipeline remains in service.**

CHS's O&M manual Section H. CORROSION CONTROL Chapter for Monitoring External Corrosion Control states "The following electrical tests have or will be performed as required on all protected pipeline systems and a report will be maintained until the next scheduled test

- (a) Pipe to soil potential
- (b) Tank to soil potential
- (c) Casing to soil potential
- (d) Insulated flange potential
- (e) Foreign structure corrosion bond
- (f) Rectifier inspection".

An operator's corrosion control procedure must require that records of annual pipe to soil potentials, be kept for the life of the system. The corrosion control procedure must require that all other records listed in Cenex's procedure be kept for a minimum of 5 years.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within [number of days] days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

In correspondence concerning this matter, please refer to **CPF 5-2007-5035M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*

cc: PHP-60 Compliance Registry
PHP-500 G. Davis (#118877)