



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

8701 South Gessner, Suite 1110  
Houston, TX 77074

**NOTICE OF PROBABLE VIOLATION  
PROPOSED CIVIL PENALTY  
and  
PROPOSED COMPLIANCE ORDER**

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 31, 2013

Mr. David Ketelsleger  
SVP General Counsel  
Chaparral Energy LLC  
701 Cedar Lake Blvd  
Oklahoma City OK 73114

**CPF 4-2013-5025**

Dear Mr. Ketelsleger:

On multiples dates in April, May, August, September, and October, 2012, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code inspected Chaparral Energy CO2 pipeline records and facilities in Oklahoma, Kansas and Texas.

As a result of the inspection, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

**1. §195.111 Fracture propagation.**

**A carbon dioxide pipeline system must be designed to mitigate the effects of fracture propagation.**

Chaparral could not demonstrate that it had designed its recently constructed pipeline(s) to mitigate the effects of fracture propagation.

A documented fracture propagation analysis was requested by PHMSA to demonstrate compliance with the requirement that the Farnsworth Laterals were designed to mitigate the effects of fracture propagation. It was determined that Chaparral had not performed a fracture propagation analysis. In addition, Chaparral could not demonstrate that fracture propagation design considerations and analysis had been performed prior to or subsequent to the commissioning of the Farnsworth laterals in 2011.

The fracture propagation analysis for the Farnsworth laterals was requested multiple times by PHMSA Southwest Region personnel, including at the initial construction inspection documentation review in April 2012, and during subsequent and follow up inspections (office and field), telephone conversations and by email.

Also, the construction of the Coffeyville pipeline took place contemporaneously with the 2012 PHMSA Southwest Region inspection of the existing Chaparral CO2 pipelines, including the Farnsworth laterals. The necessity for each of the three pipelines to have its own fracture propagation analysis performed was discussed and that Chaparral should commence work upon a documented fracture propagation analysis for the Coffeyville pipeline project while there was still time to avoid placing that pipeline in service without being in compliance with the requirement that it be designed to mitigate the effects of fracture propagation. A fracture propagation analysis for the Coffeyville pipeline was accomplished and was (after revision) found by PHMSA to be acceptable, in August 2012.

Due to differences in construction and materials, there is still the requirement to perform a separate fracture propagation analysis for each of the Farnsworth Laterals as follows:

- 4" east lateral constructed Oct/Nov 2010
- 6" west lateral constructed Jan/Mar 2011

2. **§ 195.214 Welding procedures**

**(a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under Section 5 of API 1104 or Section IX of the ASME Boiler and Pressure Vessel Code (ibr, see § 195.3) . The quality of the test welds used to qualify the welding procedure shall be determined by destructive testing.**

**(b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.**

Welding performed during the construction of the Farnsworth Lateral was not performed in accordance with a qualified welding procedure. Welding procedures presented by Chaparral were not qualified in accordance with Section 5 of API 1104 or Section IX of the ASME Boiler and Pressure Vessel Code (ibr, see § 195.3) . Chaparral has not shown that the quality of the test welds used to qualify the welding procedure was determined by destructive testing, or that test welds were examined. The welding procedure presented did not include the results of qualifying tests and was missing essential variables.

There are two Farnsworth Laterals as follows:

- 4" east lateral constructed Oct/Nov 2010
- 6" west lateral constructed Jan/Mar 2011

At the initial construction inspection documentation review in April 2012 PHMSA personnel requested the welder qualification records and the welding procedure specification (WPS) as well as the procedure qualification record (PQR) for the welding performed during the construction of the Farnsworth Laterals. A complete welding procedure contains both the WPS and the PQR.

The welder qualification records presented at the inspection indicated that welders were qualified to procedure "A100." There was not a procedure qualification record available from Chaparral for this weld procedure A100 to which welders were qualified. A one page procedure specification document was available for procedure "A100," however; no procedure qualification document was ever produced, despite repeated requests from PHMSA personnel during the course of the inspection.

It also appears that the welding procedure "A100" presented at the audit is missing important essential variables, such as speed of travel and other parameters, such as material group discrepancies between procedure and construction, and discrepancies between weld procedure and welder qualification such as changes in filler group and joint design.

### **3. §195.403 Emergency Response Training.**

**(a) Each operator shall establish and conduct a continuing training program to instruct emergency response personnel to:**

- (1) Carry out the emergency procedures established under 195.402 that relate to their assignments;**
- (2) Know the characteristics and hazards of the hazardous liquids or carbon dioxide transported, including, in case of flammable HVL, flammability of mixtures with air, odorless vapors, and water reactions;**
- (3) Recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous liquids or carbon dioxide spills, and take appropriate corrective action;**
- (4) Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage; and**

**(5) Learn the potential causes, types, sizes, and consequences of fire and the appropriate use of portable fire extinguishers and other on-site fire control equipment, involving, where feasible, a simulated pipeline emergency condition.**

**(b) At the intervals not exceeding 15 months, but at least once each calendar year, each operator shall:**

**(1) Review with personnel their performance in meeting the objectives of the emergency response training program set forth in paragraph (a) of this section; and**

**(2) Make appropriate changes to the emergency response training program as necessary to ensure that it is effective.**

PHMSA was unable to confirm that Chaparral conducted the appropriate emergency response training. PHMSA requested documentation to demonstrate appropriate training of emergency response personnel during the records portion of the inspection. There was not adequate documentation provided by Chaparral at the 2012 inspection to demonstrate appropriate training of emergency response personnel. Chaparral indicated that emergency response personnel training would be conducted as soon as possible. Chaparral has since provided documentation of emergency response personnel training, conducted in the first quarter of 2013 at locations where Chaparral personnel are stationed.

**4. § 195.420 Valve maintenance.**

**(a) Each operator shall maintain each valve that is necessary for the safe operation of its pipeline systems in good working order at all times.**

**(b) Each operator shall, at intervals not exceeding 7 1/2 months, but at least twice each calendar year, inspect each mainline valve to determine that it is functioning properly.**

Chaparral did not perform valve inspections at the proper intervals and inspections were not complete in order to determine that each valve could function properly. PHMSA personnel requested Chaparral valve maintenance records and related documentation during the records portion of the inspection. Chaparral valve maintenance records were missing on the Borger line for some mainline block valves. Valve maintenance records indicate that mainline block valves (MLV) 3 and 6 were inspected in November 2010 and December 2011. Other mainline block valves were inspected in April 2011 per the documentation provided at the inspection; however, there was no indication on the April 2011 valve inspection report that either MLV 3 or 6 were inspected at that time.

In addition, Chaparral valve maintenance records are noted as “5 - could not operate due to operating conditions” for all valves listed on the November 2010 and December 2011 valve maintenance records. Chaparral O&M procedure 195.420 Valve Maintenance Process Description states “Valves should be operated to the fullest extent practical and then returned to its position...” There was no documentation provided to indicate that further valve maintenance was performed, such as returning a valve to perform a partial operation of that valve when operating conditions became more favorable to performing valve maintenance and inspection activities.

The evidence demonstrates that the operator violated § 195.420 by failing to conduct a proper inspection per the regulations related to inspecting each main line valve. In the event that such inspections were, in fact, performed, the evidence demonstrates the operator violated § 195.404(c)(3) by failing to maintain a record of each inspection and test required by this subpart for at least 2 years or until the next inspection or test is performed, whichever is longer.

#### Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$200,000 per violation per day the violation persists up to a maximum of \$2,000,000 for a related series of violations. For violations occurring prior to January 4, 2012, the maximum penalty may not exceed \$100,000 per violation per day, with a maximum penalty not to exceed \$1,000,000 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of \$47,900 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$19,000
4	\$28,900

#### Warning Items

With respect to item(s) 3 we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these item(s). Failure to do so may result in additional enforcement action.

#### Proposed Compliance Order

With respect to items numbers 1 and 2 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Chaparral. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

#### Response to this Notice

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. All material you submit in response to this enforcement action may be 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.

In your correspondence on this matter, please refer to **CPF 4-2013-5025** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. M. Seeley", is enclosed in a light gray rectangular box.

R. M. Seeley  
Director, Southwest Region  
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*  
*Response Options for Pipeline Operators in Compliance Proceedings*

## PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Chaparral Energy LLC a Compliance Order incorporating the following remedial requirements to ensure the compliance of Chaparral Energy LLC with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to fracture propagation analyses, Chaparral shall perform a technically sound fracture propagation analysis for each of the Farnsworth Laterals. This analysis should be completed with 30 days of the Final Order.

Should the fracture propagation analysis determine that the existing design and construction of either or both of the Farnsworth laterals as commissioned is deficient with regard to mitigating the effects of fracture propagation, Chaparral develop a plan and submit that to PHMSA with 30 days of completing the analysis for approval.

2. In regard to Item Number 2 of the Notice pertaining to incomplete welding procedure documentation, including no procedure qualification document for welding procedure A100, Chaparral shall qualify this procedure per the appropriate standard and submit the documentation showing that A100 is a complete and qualified welding procedure. Chaparral shall separately address quality of weld issues as could be related to all missing essential variables in the A100 document as presented by Chaparral as the procedure used in constructing the Farnsworth laterals.

Chaparral shall complete item 2 within 30 days of the issuance of the Final Order.

4. It is requested (not mandated) that Chaparral maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.