



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

8701 S. Gessner, Suite 630  
Houston, TX 77074

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

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

February 5, 2018

Mr. Doug Shanda  
Senior Vice President, Operations  
Cheniere Corpus Christi Pipeline  
700 Milam St, Suite 1900  
Houston, TX 77002

**CPF 4-2018-1002**

Dear Mr. Shanda:

On February 9 and 10, 2017, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code inspected your Corpus Christi Pipeline Project in Corpus Christi, TX.

As a result of the inspection, it is alleged 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. **§192.225 Welding procedures.**
  - (a) **Welding must be performed by a qualified welder or welding operator in accordance with welding procedures qualified under section 5, section 12, or Appendix A of API Std 1104 (incorporated by reference, see §192.7) or section IX ASME Boiler and Pressure Vessel Code (BPVC) (incorporated by reference, see §192.7), to produce welds which meet the requirements of this subpart. The quality**

**of the test welds used to qualify welding procedures must be determined by destructive testing in accordance with the referenced welding standard(s).**

**(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.**

Cheniere Corpus Christi Pipeline (CCCP) failed to qualify welding procedures in accordance with Section 5 of API Std 1104, 20th edition incorporated by reference §192.7.

Section 5.4.1 of API Std 1104, 20th edition states:

“A welding procedure must be re-established as a new procedure specification and must be completely requalified when any of the essential variables listed in 5.4.2 are changed”.

Wall thickness group is an essential variable listed in Section 5.4.2. As a result, each wall thickness group as specified in API 1104 requires a separate qualification test.

CCCP welding procedures SMAW -A18A-FLT, SMAW-A28A-FLT, SMAW-A38A-FLT, and SMAW-A48A-FLT include the following wall thickness groups for each welding procedure: Under 3/16” (Under 0.188”); 3/16 to 3/4" (0.188 to .750”); Over 3/4" (Over .750”). In each of the four fillet welding procedures, all of the wall thickness groups were marked on the procedure as being qualified even though there was only one test record for one wall thickness group. By only testing one wall thickness group for each fillet weld procedure (SMAW -A18A-FLT, SMAW-A48A-FLT, SMAW-A38A-FLT, and SMAW-A28A-FLT), CCCP failed to qualify the welding procedures in accordance with Section 5 of API Std 1104 incorporated by reference §192.7.

## **2. §192.227 Qualification of welders and welding operators.**

**(a) Except as provided in paragraph (b) of this section, each welder or welding operator must be qualified in accordance with section 6, section 12, or Appendix A of API Std 1104 (incorporated by reference, see §192.7), or section IX of ASME Boiler and Pressure Vessel Code (BPVC) (incorporated by reference, see §192.7). However, a welder or welding operator qualified under an earlier edition than the edition listed in §192.7 may weld but may not re-qualify under that earlier edition.**

**(b) A welder may qualify to perform welding on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS by performing an acceptable test weld, for the process to be used, under the test set forth in section I of Appendix C of this part. Each welder who is to make a welded service line connection to a main must first perform an acceptable test weld under section II of Appendix C of this part as a requirement of the qualifying test.**

CCCP failed to adequately qualify welders in accordance with Section 6 of API Std 1104, 20th edition incorporated by reference §192.7.

Per §192.227, welders must be qualified in accordance with Section 6 of API Std 1104, 20th edition. Section 6.1 GENERAL: states, "The purpose of the welder qualification test is to determine the ability of welders to make sound butt or fillet welds using previously qualified procedures". However, the procedure used to qualify the welders had not been properly qualified.

CCCP provided a copy of welder's qualification register that demonstrates that welders used SMAW -A28A-FLT in the multi-qualification test to qualify welders. The welding procedure, SMAW -A28A-FLT, provided to PHMSA covered wall thickness groups ranging from: Under 3/16" (Under 0.188"), 3/16 to 3/4" (0.188 to .750"), and Over 3/4" (Over .750"). By only testing one wall thickness group for SMAW-A28A-FLT, you failed to qualify the welding procedure in accordance with Section 5 of API Std 1104, 20th edition incorporated by reference §192.7.

By not qualifying the welders to a previously qualified welding procedure, CCCP failed to adequately qualify welders in accordance with Section 6 of API Std 1104, 20th edition incorporated by reference §192.7.

**3. §192.303 Compliance with specifications or standards.**

**Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.**

**§192.225 Welding procedures.**

**(a) Welding must be performed by a qualified welder or welding operator in accordance with welding procedures qualified under section 5, section 12, or Appendix A of API Std 1104 (incorporated by reference, see §192.7) or section IX ASME Boiler and Pressure Vessel Code (BPVC) (incorporated by reference, see §192.7), to produce welds which meet the requirements of this subpart. The quality of the test welds used to qualify welding procedures must be determined by destructive testing in accordance with the referenced welding standard(s).**

**(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.**

CCCP failed to construct a pipeline facility in accordance with written specifications by using an unqualified welding procedure and unqualified welders per Welding Manual: Doc Number ES-PPL-7712-CU-0400, Section 2.1 and 2.2. Section 2.1 states, "All welding,

including temporary welds, utility piping welds, and structural welds shall be performed using qualified welding procedures". Section 2.2 states. "All welding, including temporary welds, shall be performed by welders who are qualified for welding procedure to be used".

The welding procedure used to weld the pipe indicated it had been qualified for a wall thickness group of Under 3/16" (Under 0.188"). However, destructive testing results for coupons for each welding procedure only show wall thickness group 3/16 to 3/4" (0.188 to .750").

Section 5.4.1 of API Std 1104 states,

"A welding procedure must be re-established as a new procedure specification and must be completely requalified when any of the essential variables listed in 5.4.2 are changed".

Wall thickness is an essential variable requiring separate qualified tests for each wall thickness group specified in API Std 1104.

Welders must be qualified in accordance with Section 6 of API Std 1104, 20th edition. Section 6.1 GENERAL: states, "The purpose of the welder qualification test is to determine the ability of welders to make sound butt or fillet welds using previously qualified procedures". However, the procedure used to qualify the welders had not been properly qualified.

From February 9<sup>th</sup> to February 10<sup>th</sup>, 2017, PHMSA inspectors discovered that CCCP used welding procedure SMAW-A28A-FLT to make 51 welds during the construction of the Sinton Compressor station. The wall thickness of the pipe, in the compressor station, was in the Under 3/16" (Under 0.188") group. The Under 3/16" (Under 0.188") wall thickness group was not destructively tested when qualifying procedure SMAW-A28A-FLT.

Therefore, CCCP failed to construct a pipeline facility in accordance with written specifications by using an unqualified welding procedure and unqualified welders per Welding Manual: Doc Number ES-PPL-7712-CU-0400, Section 2.1 and 2.2.

### Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$205,638 per violation per day the violation persists up to a maximum of \$2,056,380 for a related series of violations. For violations occurring between January 4, 2012 to August 1, 2016, the maximum penalty may not exceed \$200,000 per violation per day, with a maximum penalty not to exceed \$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 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 \$207,800 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$46,300
2	\$53,500
3	\$108,000

Proposed Compliance Order

With respect to item(s) 1, 2, and 3 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Cheniere Corpus Christi Pipeline. 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 4-2018-1002** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Frank Causey  
Acting 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 Cheniere Corpus Christi Pipeline a Compliance Order incorporating the following remedial requirements to ensure the compliance of Cheniere Corpus Christi Pipeline with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to failing to qualify welding procedures in accordance with Section 5 of API Std 1104, 20th edition incorporated by reference §192.7, Cheniere Corpus Christi Pipeline must requalify the following welding procedures in accordance with standards set in Section 5 of API Std 1104, 20th edition: SMAW -A18A-FLT, SMAW-A28A-FLT, SMAW-A38A-FLT, and SMAW-A48A-FLT. The procedures cannot be used on any other construction project or Part 192 regulated piping until all corrections are made and accepted by the PHMSA Southwest Region Director.
2. In regard to Item Number 2 of the Notice pertaining to failing to adequately qualify welders in accordance with Section 6 of API Std 1104, 20th edition incorporated by reference §192.7, Cheniere Corpus Christi Pipeline must requalify all welders that were qualified with the following procedures: SMAW -A18A-FLT, SMAW-A28A-FLT, SMAW-A38A-FLT, and SMAW-A48A-FLT.
3. In regard to Item Number 3 of the Notice pertaining to failing to weld on a §192 pipeline facility with a qualified welding procedure qualified under section 5 of API Std 1104 (incorporated by reference in §192.7), Cheniere Corpus Christi Pipeline must perform destructive tests on a statistically significant number of welds made with SMAW -A18A-FLT, SMAW-A28A-FLT, SMAW-A38A-FLT, and SMAW-A48A-FLT welding procedures to show that the welds have the required strength and mechanical properties for the application. The proposed testing plan must include specific designation of the welds to be tested, an analysis showing that the number of welds to be tested is statistically significant based on the total number of welds made, the procedures that Cheniere Corpus Christi Pipeline proposes to be used to cut out and test the welds, and the qualified welding procedure that will be used to re-weld the pipeline facility. The proposed testing plan must be submitted to the PHMSA Southwest Region Director for approval prior to initiating the plan. If any of these welds fail destructive testing, the number of welds tested must be expanded as specified by the Southwest Region Acting Director to include an additional number of welds made with any of SMAW -A18A-FLT, SMAW-A28A-FLT, SMAW-A38A-FLT, and SMAW-A48A-FLT welding procedures.
4. Provide PHMSA with documentation that verifies completion of:
  - Item 1 within 30 days following the date of the Final Order.
  - Item 2 must be completed within 30 days of completion of item 1 or prior to the welders welding to the newly qualified procedures.

- Submit the testing plan described in Item 3 for approval by the Southwest Region Director within 30 days following the date of the Final Order and documentation showing completion of the testing an additional 30 days following approval of the plan by the Southwest Region Acting Director.
5. It is requested (not mandated) that Cheniere Corpus Christi maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Jon Manning, Acting Director, Southwest, 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.