



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 28, 2018

Mr. Joseph A. Blount, Jr.
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

CPF 2-2018-5003

Dear Mr. Blount:

Beginning November 30, 2016, following the November 2, 2016, Congressional letter requesting investigation in to Colonial Pipeline Company's maintenance and oversight activities, 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 (U.S.C.) inspected Colonial Pipeline Company's (Colonial) Operator Qualification (OQ) Program in Alpharetta, Georgia.

As a result of the inspection, it is alleged that Colonial has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. §195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a)...

(d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an accident as defined in Part 195...

Colonial failed to comply with the regulation because it did not evaluate individuals whose performance of a covered task contributed to accidents, as required in Part 195.

Section 12 of Colonial's Operator Qualification (OQ) Program, titled "Post Accident Investigations," contained requirements for post-accident review in the event of a pipeline accident. Specifically, Section 12 required Colonial to determine if a covered task was being performed at the time of, or leading up to, the accident, and whether performance of a covered task contributed to the accident. This review was to be performed in accordance with Corporate Procedure 16, titled "Incident Analysis and Near Miss Process," using Colonial's *Learning from Experience and Analysis Process* (LEAP).

Section 12 further required that Colonial determine whether performance of a covered task may have contributed to the accident and, if so, "all personnel who were performing the Covered Tasks will have their qualifications immediately suspended until it can be determined whether his/her action contributed to the accident." Section 12 further indicates that such suspensions are to be documented using Appendix D of Colonial's OQ Program, titled "Disqualification and Suspension." Moreover, Section 12 specifies that if an individual's qualifications are suspended or revoked, the Appendix D documentation is to be forwarded to Colonial's OQ Coordinator, who in turn is to notify the Technical Training Department designee responsible for updating Covered Task qualification records in Colonial's Learning Management System.

During its review, PHMSA identified three reportable accidents on the Colonial system where performance of a covered task caused or contributed to the accident. These accidents were documented on PHMSA Form 7000-1, titled "Accident Report-Hazardous Liquid Pipeline Systems," and submitted electronically via the Online Data Entry System (ODES). The specific report numbers and submittal dates are as follows:

- No. 20140287-20157 Date 08/11/2014
- No. 20150286-20902 Date 08/13/2015
- No. 20150326-20738 Date 09/12/2015

All three accidents occurred while performing excavation or backfilling activities. Per Colonial's OQ program, these activities required Covered Tasks 32.0 and 39.0, titled "Observation of Excavation Activities" and "Backfilling a Trench Following Maintenance," respectively.

Colonial documented its response to each of the above-referenced reportable accidents in an *Incident Analysis Report*. Each *Incident Analysis Report* documents actions taken by Colonial in response to each respective accident. None of the *Incident Analysis Reports* documented that performance of a covered task was involved, whether performance of a covered task contributed to the accident, or which individuals performed any covered tasks during the activities leading to each accident. Furthermore, Colonial personnel were unable to confirm any Appendix D "Disqualification or Suspension" documentation had been completed, that any information was forwarded to the OQ Coordinator, or that Colonial's Technical Training Department was notified, as required by Section 12 of Colonial's Operator Qualification Program. Consequently, Colonial was unable to demonstrate its compliance with § 195.505(d).

2. **§195.505 Qualification program.**

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a)...

(b) Ensure through evaluation that individuals performing covered tasks are qualified...

Colonial failed to comply with the regulation because it did not ensure through evaluation that individuals performing covered tasks were qualified.

At the time of PHMSA's inspection, Colonial's OQ program relied on three OQ service providers to provide evaluation material, herein referred to as OQ Service Provider A, B and C. PHMSA's review identified several instances where the evaluation material across the three service providers was inadequate to evaluate an individual's knowledge, skill and ability to perform a given covered task.

All three service providers relied on a written, electronic, or verbal examination to evaluate an individual's knowledge of the covered task, as well as a performance verification to evaluate an individual's skill and ability to perform the covered task. Evaluation materials were identified that were not applicable to the given covered task or lacked a sufficient number of questions, or questions of sufficient detail, to evaluate an individual's knowledge of the task. Furthermore, performance verification material was identified that did not require performance of the task. Moreover, at least one of Colonial's service providers' evaluation materials required knowledge of Colonial procedures and policies despite the fact that Colonial's OQ program itself did not contain provisions for assuring knowledge of these procedures and policies. Consequently, the above-referenced evaluation materials were not developed and tailored to specific provisions and operational parameters of Colonial's OQ program.

The following examples detail four Covered Tasks with evaluation methods for determining an individual's knowledge of the task, as well as performance verification to evaluate an individual's skill and ability to perform the task, that were found to be inadequate:

1. Covered Task 7.7, titled "Perform Coating Inspection"

Colonial's OQ Program accepted two examinations from OQ Service Provider A, one of which was titled *Aboveground Pipe Coating and Inspection*. This examination could be used to evaluate an individual's knowledge of the task. PHMSA's review of the above-referenced examination determined that it was inadequate for determining an individual's knowledge of the task. Of the 20 multiple choice questions included in the evaluation, no questions examined the individual's knowledge of evaluating surface preparation, measuring coating thickness, visually inspecting coatings or conducting holiday testing. Understanding of each of these aspects of a coating inspection is fundamental to demonstrating knowledge of the task.

The OQ plan accepted two performance verifications from OQ Service Provider A, *Visual Inspection for Atmospheric Coating* and *Use Coating Inspection Tools*, either of which could be used to evaluate an individual's skill and ability to perform the task. The

performance verification *Visual Inspection for Atmospheric Coating* was not applicable to performing visual coating inspections. It was intended for atmospheric corrosion inspections and did not address the use of any type of coating inspection equipment. The performance verification *Use Coating Inspection Tools* was inadequate to the task. It required the individual to conduct wet film and dry film thickness measurements, electronic holiday detection test and adhesion tests but did not require evaluation of surface preparation or measurement of surface temperature, ambient temperature, dew point or relative humidity all of which are required, and fundamental, to perform the task.

The OQ plan accepted two examinations and the accompanying performance verifications from OQ Service Provider B, *Prevention of Atmospheric Corrosion* and *Electrical Inspection of Coatings (jeeping)*, either could be used to evaluate an individual's knowledge, skill and ability to perform the task. *Prevention of Atmospheric Corrosion* is a module that addresses a number of coating related tasks such as atmospheric corrosion inspection, surface preparation, coating application and coating inspection. It contains twenty-five multiple choice questions that are administered after going through a training module. The training module contained many technical errors such as indicating that a Barchol Hardness Tester can be used to measure coating dry film thickness and a Tooke Gauge can be used to conduct Holiday Testing. A Barchol Hardness Tester measures coating hardness and a Tooke Gauge measure coating thickness through destructive testing. The training module also incorrectly referred to FBE Tape Coatings. FBE (fusion bonded epoxy) is a powder coating, not a tape wrap. Of the twenty-five questions, only a few pertained specifically to coating inspection and most were too simple to adequately evaluate an individual's knowledge of the task such as "How is wet film thickness measured?" with the correct answer being "wet film thickness gauge."

The module *Electrical Inspection of Coatings (jeeping)* only applied to use of an electrical holiday tester. Both the examination and accompanying performance verification were inadequate for the task because they only addressed one type of inspection instrument and not all the other instruments and activities such as visual inspections that would be required to perform the task.

The OQ plan accepted two evaluations from OQ Service Provider C, one of which was titled " *Inspection of Above and Below Ground Coatings.*" The referenced evaluation was not adequate to evaluate an individual's skill and ability to perform the task because it was administered by oral examination. It did not verify that the individual was capable of correctly using any of the required coating inspection instrumentation.

2. Covered Task 7.6, titled "Apply Coating Using Spray Application"

The OQ plan accepted two examinations and accompanying performance verifications from OQ Service Provider B, *Prevention of Atmospheric Corrosion* and *Application and Repair of External Coatings*. Both examinations did not include any questions pertaining to spray application of coatings.

Furthermore, the above-referenced performance verification, titled "*Application and Repair of External Coatings*" did not require the coating to be applied by spray

application. It indicated the equipment and material needed to perform the evaluation were “Brush, Roller, Coating, Sandblasting equipment, Water blasting equipment and Hand tools.”

3. Covered Task 32.0, titled “Observation of Excavation Activities”

The OQ plan accepted OQ Service Provider A’s examination and performance verification, titled “*Excavating and Backfilling.*” The examination contained twenty multiple choice questions, few of which pertained to excavation activities. The performance verification required the individual to locate or simulate locating the pipeline, installing or simulating installation of a line marker, and inspecting and maintaining or simulating inspecting and maintaining a line marker, all of which are stand-alone covered tasks. The performance verification then required the individual to explain backfilling requirements and using company manuals or procedure books explain what trainees should do if they encounter any damage or defects while performing any of the above tasks. The performance verification did not require any excavation activities be performed or simulated.

The OQ plan accepted OQ Service Provider B’s examination and performance verification, titled “*Damage Prevention During Excavation Activities.*” The training module and the accompanying examination made reference to performing activities in accordance with the operator’s policies and procedures. The training module contained a disclaimer that indicated using the material constituted acceptance that the material must be supplemented with company specific instruction of the policies and procedures of the company. All OQ Service Provider B’s material contained this disclaimer. Colonial’s OQ plan, however, did not contain any provisions for evaluating an individual’s knowledge of Colonial’s policies and procedures which made this service provider’s materials inadequate as a sole evaluation of an individual’s knowledge of this task.

Likewise, the performance verification permitted actual performance of the task, simulation of the task, or oral assessment. Oral assessment is not acceptable because it does not evaluate an individual’s skill and ability to perform the task. An individual could be qualified for this task without ever having been at an excavation site or performing any excavation activities.

The OQ plan accepts one evaluation from OQ Service Provider C, titled “*Observation of Excavating and Backfilling.*” This evaluation was to be done by oral assessment only. As described above, this is not acceptable because oral assessment does not evaluate an individual’s skill and ability to perform the task. An individual could be qualified for this task without ever having been at an excavation site or performing any excavation activities.

4. Covered Task 39.0, titled “Backfilling a Trench Following Maintenance”

The OQ plan accepts OQ Service Provider B’s examination and performance verification, titled “*Backfilling a Trench Following Maintenance.*” The training module that accompanies the examination indicates that “company personnel” will be present at the excavation site to take responsibility for certain functions of this task, such as

understanding soil types and soil compaction requirements. The above-referenced training module contains a section titled "*Prerequisite Knowledge*" that indicates "prior to backfilling a trench company personnel must be familiar with soil types, soil compaction methods and backfilling operations." The training module also indicates "company personnel are responsible for compacting backfill." One of the exam questions was "Who is ultimately responsible for determining whether backfill material is suitable for backfill around the pipe?" with the correct answer being "Company Personnel." This training module and exam are not acceptable for the task since the material indicates that the individual being evaluated will not be responsible for understanding soil types or soil compaction requirements, "Company Personnel" will have that responsibility. Moreover, PHMSA's review revealed that Colonial does not always require company personnel to be present during backfilling activities, which further nullifies the adequacy of the above-referenced examination and performance verification.

As with the covered task referenced in Item 3 above, titled "*Observation of Excavation Activities*," the performance verification from OQ Service Provider B could be done by oral assessment and the performance verification from OQ Service Provider C was only done by oral assessment, which is not adequate for the given task.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$209,002 per violation per day the violation persists, up to a maximum of \$2,090,022 for a related series of violations. For violations occurring prior to November 2, 2015, 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. The Compliance Officer has reviewed the circumstances and supporting documentation involved in Item 1 above and has recommended that you be preliminarily assessed a civil penalty of \$67,000.

Proposed Compliance Order

With respect to Item 2, pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Colonial Pipeline Company. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

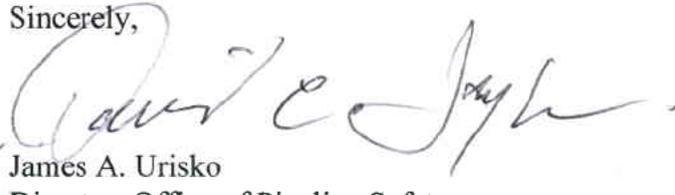
Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be made publicly available. If you believe that any 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).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. 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 you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 2-2018-5003** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in black ink, appearing to read "James A. Urisko". The signature is written in a cursive style with a large initial "J".

for James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

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 Colonial Pipeline Company (Colonial) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Colonial with the pipeline safety regulations:

1. In regard to Item Number 2 of the Notice pertaining to evaluation of individuals performing covered tasks,
 - a. Review all written, electronic and oral examinations to assure they contain a sufficient number of questions with sufficient detail and complexity to establish an individual's knowledge of the given covered task and a knowledge of Colonial's procedures for performing the covered task.
 - b. Review all performance verification materials to assure they provide for actual performance of the covered task in accordance with Colonial's procedures.
 - c. Replace, modify or supplement all evaluation material to assure the material will adequately establish an individual's knowledge, skill and ability to perform a covered task properly and in accordance with Colonial procedures.
2. Within 90 days of issuance of the Final Order, Colonial must submit to the Director, Office of Pipeline Safety, PHMSA Southern Region, documentation showing satisfactory completion of Item 2, including, at a minimum, a list of all evaluations that were replaced, modified or supplemented.
3. It is requested (not mandated) that Colonial maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to James A. Urisko, Director, Southern 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.