



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

June 8, 2022

Ms. Sara Lyons
Pipeline Investigator
National Transportation Safety Board
490 L'Enfant Plaza, SW
Washington, D.C. 20594

Dear Ms. Lyons:

In a letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA), dated May 12, 2022, you requested an interpretation regarding qualification of pipeline personnel to perform covered tasks on pipelines under 49 Code of Federal Regulations (CFR) Part 192, § 192.801 and Part 195, § 195.501.

You stated the National Transportation Safety Board is investigating a natural gas-fueled explosion that occurred during routine maintenance on a gas transmission line. You stated the operator did not designate launching and receiving pigs as a covered task prior to the incident and relied on on-the-job training for pigging-specific operations. You stated, similarly, industry standards such as API 1161, Recommended Practice for Pipeline Operator Qualification (OQ), and ANSI/GPTC Z380.1, Guide for Gas Transmission, Distribution, and Gathering Piping Systems, may not prompt operators to identify launching and receiving pigs as a covered task. You requested PHMSA's interpretation of the applicability of the Federal pipeline safety regulations for several questions. Your questions are reprinted and PHMSA's responses follow your questions at the end of this letter.

Applicable Regulations:

The Part 192, Subpart N—Qualification of Pipeline Personnel and the Part 195, Subpart G—Qualification of Pipeline Personnel have identical scope requirements and are reprinted below.

§ 192.801 Scope and § 195.501 Scope

(a) This subpart prescribes the minimum requirements for operator qualification of individuals performing covered tasks on a pipeline facility.

(b) For the purpose of this subpart, a covered task is an activity, identified by the operator, that:

- (1) Is performed on a pipeline facility;
- (2) Is an operations or maintenance task;
- (3) Is performed as a requirement of this part; and
- (4) Affects the operation or integrity of the pipeline.

Background

Buildup of internal pipeline debris (i.e., produced sand, salt, or water, metal shavings, grease, etc.), corrosion, and buckles or denting within a pipeline are serious problems that affect product transportation, and pipeline integrity that can result in accidents or incidents. There are special in-line tools, known as pigs, that can be used to help prevent these problems, to ensure optimal flow of products, for cleaning, and internal integrity inspection of pipelines. A pigging system consists of a pig, a launcher, and a receiver. Cleaning pigs remove debris, liquids, scale from the internal wall, etc. Gauging pigs identify if dents or other obstructions are in the pipeline. More sophisticated and sensitive in-line inspection (ILI) tools, often referred to as smart pigs, identify and measure the severity of anomalies in the pipe such as wall loss due to corrosion, cracks, dents, gouges and buckles. Each pig type has a purpose and is used after initial construction and for maintenance or inspection of the pipelines.

Analysis

The operator qualification regulations cover operation and maintenance (O&M) tasks of a pipeline system. As pipeline pigs are used for O&M pipeline activities and are integral to meeting the integrity management requirements of Parts 192 and 195, the launching and receiving of pipeline pigs is a task that meets the “four-part-test” in § 192.801(b) or § 195.501(b). In addition, while industry standards, such as the ones you mentioned, may provide a useful starting point for identifying industry-accepted covered tasks, the absence of a task within these industry standards does not mean that the task is not covered under the operator qualification requirements in § 192.801(b) or § 195.501(b). It should be noted that ASME B31Q, Pipeline Personnel Qualification, does identify and provide guidance for the covered task of launching or receiving internal devices (pigs) using traps. To meet the OQ requirements, operators must evaluate each task they perform and determine whether the task is a covered task using the four-part-test.

Your questions are reprinted and PHMSA’s responses to your questions follow each question:

Question 1 - Must activities be specifically prescribed in the regulations to be “performed as a requirement of this part” in accordance with 49 CFR 192.801(b)(3)?

Response 1 – No, the four-part-test is applicable for regulated pipeline activities under 49 CFR Parts 192 and 195. Any activity meeting the four-part test is considered a covered task, including activities that are integral to meeting the requirements of the regulations.

Question 2 - Is “launching and receiving pigs” a covered task as defined in 49 CFR 192.801(b) and 49 CFR 195.501(b)?

Response 2 – Yes, as explained in the analysis section, the described pipeline task meets the four-part-test.

Question 3 - Does it matter which regulation the activity is being performed to meet (i.e., 49 CFR 192.493, 192.632, 192.710, 192.750, 192.921, 192.937, 195.11(b)(10), 195.416, 195.452, 195.579(a), or any other requirement of 49 CFR Parts 192 or 195)?

Response 3 – No, the pipeline activity meets the four-part-test as explained in the analysis section.

Question 4 - Does it matter if the activity is being performed in preparation to meet the regulatory requirement (e.g., a gauge pig is being launched in preparation for a required in-line inspection tool)?

Response 4 No, the pipeline activity meets the four-part-test as explained in the analysis section.

Question 5 - Does it matter if the activity is being performed to meet a performance-based requirement (e.g., a cleaning pig is being launched to prevent and/or mitigate internal corrosion)?

Response 5 – No, the pipeline activity meets the four-part-test as explained in the analysis section.

Conclusion

A regulated pipeline pig launching and receiving task, whether cleaning, product batching, or integrity inspections, is an O&M activity that is performed as a requirement of Parts 192 and 195 and, therefore, is an operator qualification activity under the four-part-test. Not identifying this task under its O&M does not exempt a pipeline operator from meeting the operator qualification requirements. Regulations for operator qualification are not intended to explicitly identify all possible pipeline tasks that require operator qualifications. Rather, the regulations have established the four-part-test for which pipeline operators are to screen their activities for operator qualification criteria. Operators must evaluate each task they perform and determine whether the task is a covered task using the four-part-test. In addition, industry standards not identifying launching and receiving pigs as a covered task does not exempt operators from meeting the Federal pipeline safety regulations including the operator qualification requirements.

If we can be of further assistance, please contact Tewabe Asebe at [REDACTED].

Sincerely,

**JOHN A
GALE** Digitally signed by
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John A. Gale
Director, Office of Standards
and Rulemaking



National Transportation Safety Board

Washington, D.C. 20594

Office of Railroad, Pipeline and Hazardous Materials Investigations

May 12, 2022

John Gale
Director, Office of Standards and Rulemaking
Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Dear Mr. Gale:

I am requesting a formal interpretation of PHMSA's Operator Qualification (OQ) Rule.

The National Transportation Safety Board is conducting an investigation of a natural gas-fueled explosion that occurred during routine maintenance on a gas transmission line.¹ The operator did not designate launching and receiving pigs as a covered task prior to the accident; they relied on on-the-job training for pigging-specific operations. Similarly, industry guidance such as API 1161, *Recommended Practice for Pipeline Operator Qualification (OQ)*, and ANSI/GPTC Z380.1, *Guide for Gas Transmission, Distribution, and Gathering Piping Systems*, may not prompt operators to identify launching and receiving pigs as a covered task.

Please answer the following questions to clarify how the federal regulations apply:

- Must activities be specifically prescribed in the regulations to be “performed as a requirement of this part” in accordance with 49 CFR 192.801(b)(3)?
- Is “launching and receiving pigs” a covered task as defined in 49 CFR 192.801(b) and 49 CFR 195.501(b)?
 - Does it matter which regulation the activity is being performed to meet (i.e., 49 CFR 192.493, 192.632, 192.710, 192.750, 192.921, 192.937, 195.11(b)(10), 195.416, 195.452, 195.579(a), or any other requirement of 49 CFR Parts 192 or 195)?

¹ See the public docket at <https://data.nts.gov/Docket/Forms/searchdocket> and search for NTSB Accident ID PLD21FR002. Because this investigation is open, the docket will be updated in the future.

- Does it matter if the activity is being performed in preparation to meet the regulatory requirement (e.g., a gauge pig is being launched in preparation for a required in-line inspection tool)?
- Does it matter if the activity is being performed to meet a performance-based requirement (e.g., a cleaning pig is being launched to prevent and/or mitigate internal corrosion)?

The NTSB staff appreciates PHMSA's continued support of our ongoing investigation and your timely response to this request.

Sincerely,

Sara Lyons
Investigator-in-Charge