

Guidance Document for the Qualification of Liquid Pipeline Personnel

API PUBL 1161
FIRST EDITION, AUGUST 2000



American
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Pipeline Segment

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SPECIAL NOTES

This API Guidance Document for the Qualification of Pipeline Personnel was developed by the API's subcommittee on Training to help pipeline operators comply with the Research and Special Program Administration's (RSPA) Final Rule on Pipeline Safety: Qualification for Pipeline Personnel.

Special acknowledgement is given to the Consortium On Operator Qualification (COOQ), a group of liquid pipeline representatives, which developed several appendices within this publication, including Example Operator Qualification Premises and Definitions, as well as the Example Covered Task Lists. The Consortium on Operator Qualification's efforts and collaboration with the API Subcommittee on Training was instrumental to the development of this publication.

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FOREWORD

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Suggested revisions are invited and should be submitted to the general manager of the Pipeline Segment, American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005.

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American Petroleum Institute's Guidance Document

Department of Transportation
Research and Special Programs Administration
49 CFR Part 195

QUALIFICATION OF LIQUID PIPELINE PERSONNEL

1. Background

The United States Department of Transportation (DOT), Research and Special Programs Administration (RSPA), requires that pipeline operators develop a written qualification program to evaluate personnel and contractor ability to perform covered tasks and to recognize and respond to abnormal operating conditions that may be encountered while performing these covered tasks. This is a performance-based qualification program. The regulations can be found in 49 CFR Part 195 and became effective October 26, 1999. A detailed discussion of the rule is included in this guidance document as Appendix A.

To provide guidance to the liquids pipeline industry, the American Petroleum Institute's Subcommittee on Training developed this guidance document to help pipeline operators comply with the rule. Pipeline operators may choose to use all or part of this document to design a program to comply with the qualification rule or may elect to develop their own program independent of this publication. Pipeline operators may also choose to modify an existing program.

This publication represents the consensus position of the pipeline companies involved in the development of this document and is designed as an aid in developing a qualification program. **This is a guidance document and should not be interpreted as a standard or recommended practice.** Pipeline operators should continue to exercise independent judgement in determining whether their programs conform to the regulatory requirements.

2. Regulatory Deadlines

The table below shows the compliance deadlines required in the rule:

August 27, 1999	Final rule published: Reference the Federal Register , Volume 64, Number 166, published Friday, August 27, 1999, pages 46853-46867.
October 26, 1999	Rule became effective.
April 27, 2001	Operators must have written qualification program complete.
October 28, 2002	Operators must complete the qualification of individuals performing covered tasks.

3. Affected Personnel

The personnel affected by the qualification program include any individual who performs a "covered task" and those who have involvement in ensuring a qualified workforce.

Descriptions or titles of individuals who may perform covered tasks include:

- Contractors
- Delivery/Gauger Personnel
- Front-line Supervisors including Lead Persons
- Operations and Maintenance Personnel
- Maintenance Technicians
(electrical/instrumentation/mechanical/corrosion)
- Patrol Pilots
- Pipeline Controllers/Dispatchers
- Terminal Operators
- Welders.

Individuals who are involved in ensuring a qualified workforce may include:

- Contractors
- Front-line Supervisors
- Human Resources Personnel
- Operations and Maintenance Trainers
- Operations, Maintenance and Control Center Managers
- Regulatory Compliance Personnel
- Team Leaders.

4. Written Program

The regulation requires that pipeline operators have a written qualification program. Operators without any qualification program must establish a written program to evaluate the individuals performing certain operation and maintenance activities on pipeline facilities that could affect pipeline operation or integrity. **Operators with existing programs may modify those programs as necessary to ensure compliance with the minimum requirements of this rule.**

The written program should include an introduction and address the seven required elements of the qualification rule. Below is a breakdown of the written program.

4.1 Introduction

The written program should include an introduction that addresses the objective of the qualification program, which is to ensure your company has a qualified workforce and to reduce the probability and consequence of accidents caused by human error. It should reference the regulation, 49 CFR Part 195, Subpart G, Sections 195.501 through 195.509. You also may consider including a copy of the regulation as an attachment to the written program for reference.

4.2 Seven Required Elements

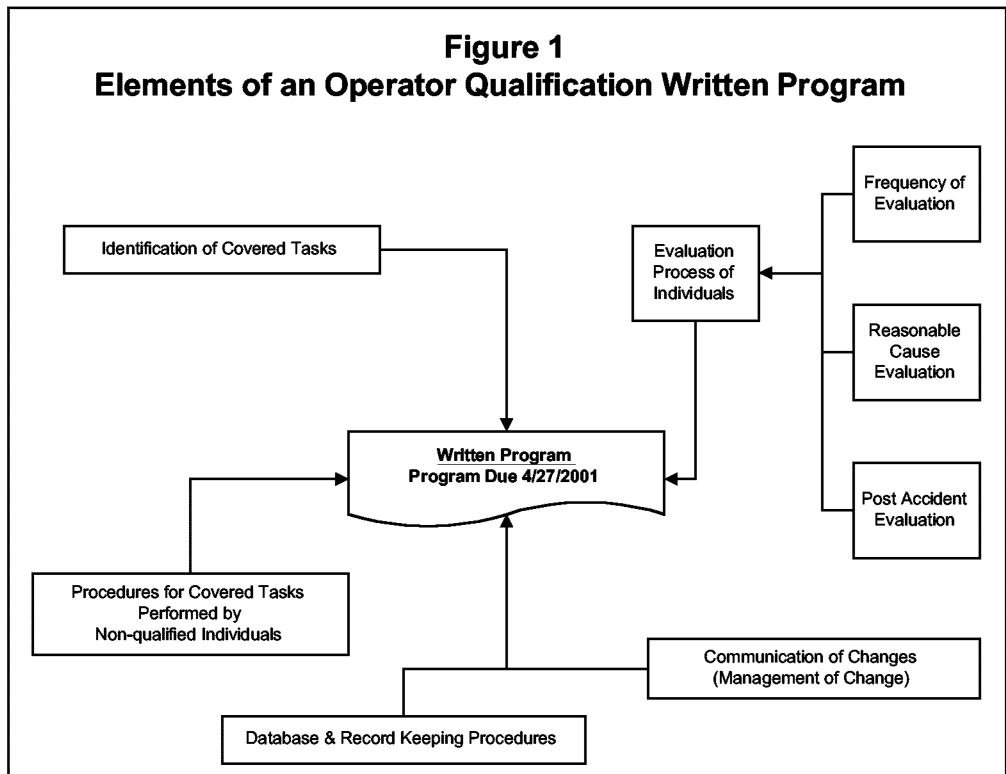
The written program must address the following required seven elements of the rule (49 CFR Part 195.505).

1. Identify covered tasks that personnel perform on your pipeline facilities.
2. Ensure, through evaluation, that individuals are qualified to perform covered tasks.
3. Allow non-qualified individuals to perform a covered task under the direct observation of a qualified person.
4. Evaluate an individual if there is reason to believe that the individual's performance of a covered task contributed to an accident as defined in 49 CFR Part 195.
5. Evaluate an individual if there is reason to believe that the individual is no longer qualified to perform a covered task.
6. Ensure that changes affecting covered tasks are appropriately communicated.
7. Identify the intervals at which re-evaluation of the individual's qualifications is needed

Each of these seven elements is discussed in this guidance document.

5. Suggested Program

Paragraphs 5 through 6 of this guidance document provide a basic outline for a written qualification program. Your program does not have to follow these contents, but at a minimum your company should ensure that the seven elements discussed in paragraph 4.2 are included. Figure 1 shows the elements that must be included in the program.



5.1 Format

A qualification program should be developed in a format that is convenient to your company, such as paper-based, electronic format, or web-based. The program should be accessible to company users and government regulators.

5.2 Process for Developing the Written Program Content

To develop a written program that encompasses the seven required elements, it is recommended that your company's program be developed using the following components.

- Premises and Definitions
- Task Identification and Analysis
- List of Covered Tasks (This may be included as an attachment)
- Evaluation Methods and Ongoing Evaluation
- Non-Qualified Individuals
- Contractor Personnel
- Record Keeping.

5.3 Premises and Definitions

**Develop the
Premises and
Definitions for
Interpreting the
Four-Part Test**

Premises and definitions are important because they provide a standard for accurately and consistently identifying tasks and determining whether they are covered or not covered.

The premises should address how your company interprets and applies the four-part test used to identify covered tasks and the company's understanding of abnormal operating conditions associated with covered tasks.

When developing premises and definitions, it is helpful to review the rule's four-part test and establish what your company considers:

- a pipeline facility
- an operations or maintenance task
- an activity specifically required of 49 CFR Part 195
- an activity that affects the operation or integrity of the pipeline

An example set of premises and definitions is included in Appendix B.

NOTE: When you have fully established your premises and definitions, strictly adhere to them.

5.4 Task Identification and Analysis

This analysis should be completed for each position, required by your company, which performs operations or maintenance activities including contractor positions.

Record each applicable activity on a master task list. It is important to focus on the activities of the position and not its responsibilities to determine if the activities are covered tasks.

Task identification and analysis may be accomplished by:

- Reviewing 49 CFR Part 195
- Interviewing individuals within each job position
- Reviewing operations, maintenance and safety manuals
- Reviewing contracts
- Reviewing the example covered task list in Appendix C of this guidance document. Review Appendix D for an expanded description of each covered task.

5.5 Identification of Covered Tasks Using the Four-Part Test

Note: An example list of covered tasks is included in Appendix C with an expanded list in Appendix D.

To identify which activities are covered tasks for your written program, measure each activity against the rule's four-part test. Adhere to the premises your company developed as you apply the four-part test to identify covered tasks.

The four-part test consists of the criteria listed below:

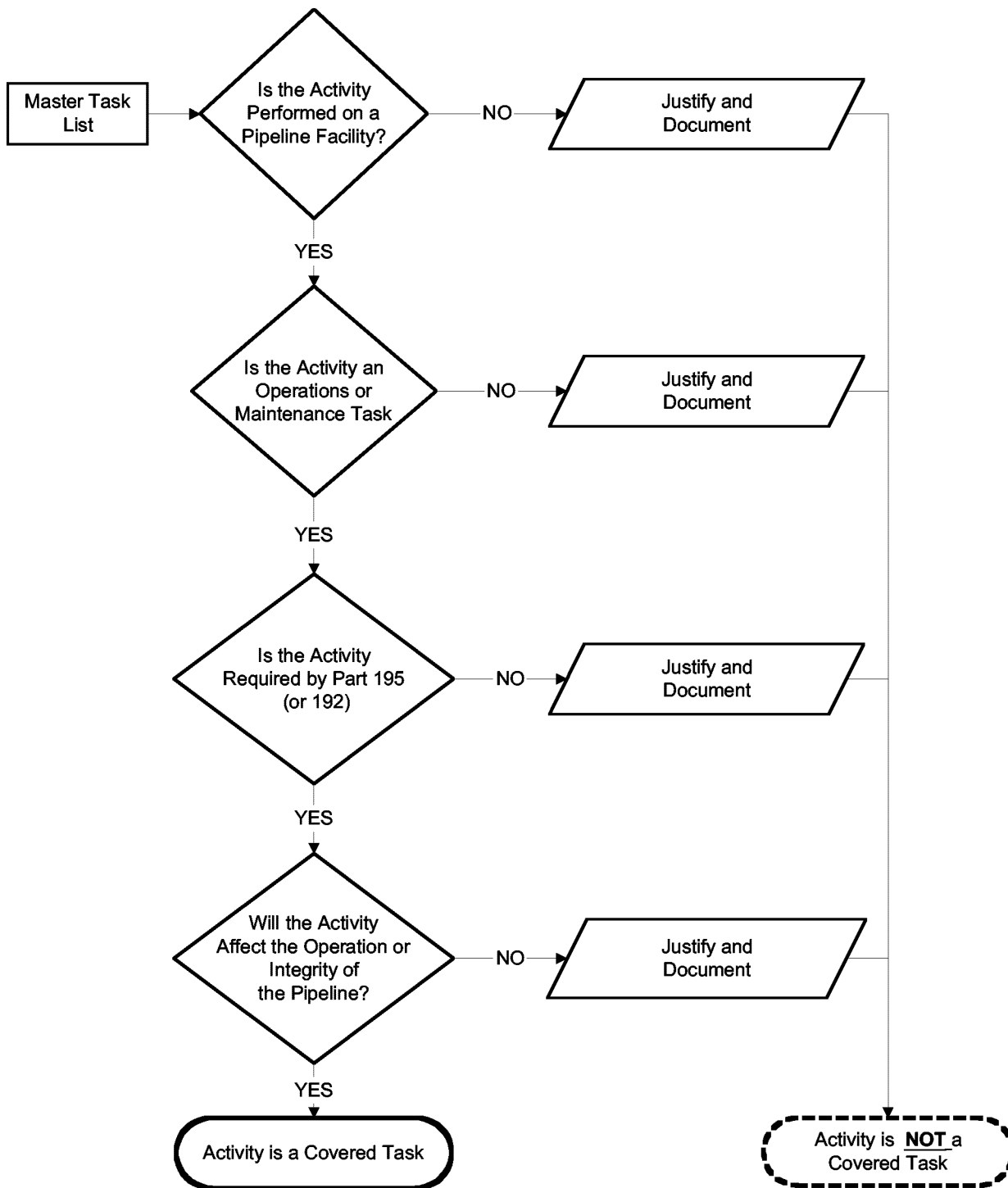
- Is it performed on a pipeline facility?
- Is it an operations or maintenance task?
- Is it performed as a requirement of 49 CFR Part 195?
- Does it affect the operation or integrity of the pipeline facility?

All four questions must be answered “yes” for the activity to be a covered task. Figure 2 shows the process for identifying and documenting covered tasks.

Additional guidance related to the covered task four-part test can be found in the Supplementary Information of the rule. (See Federal Register, Volume 64, Number 166, published Friday, August 27, 1999, pages 46853-46867.)

It is highly recommended that each company document its reason(s) that an activity does not meet the criteria in the four-part test so the rationale may be referenced during regulatory review.

Figure 2
Application of the Four-Part Test to Identify Covered Tasks



5.6 **Evaluation**

5.6.1 **Methods**

The written program must provide information on how the operator will evaluate individuals to determine whether they are qualified to perform covered tasks.

The rule provides several acceptable evaluation methods:

- written exam
- oral exam
- work performance history
- observation during performance on-the-job
- observation during on-the-job training
- simulations
- other forms of assessment

Appendix E provides acceptable evaluation methods for transitional, initial and subsequent qualification.

- **Transitional qualification** is that which is completed by October 28, 2002, for individuals who have been performing a covered task on a regular basis prior to August 27, 1999.
- **Initial qualification** is that done at any time for individuals who were not performing a covered task prior to October 26, 1999.
- **Subsequent qualification** refers to re-evaluating an individual at an interval established by the operator (e.g., annually, every three years, etc.).

Suggestions on the effective use of each evaluation method are listed in Appendix F.

When all covered tasks have been identified, each individual who performs those covered tasks must be evaluated to determine whether they are qualified to perform them. The evaluation method or combination of methods should sufficiently measure the individual's knowledge and skills to perform the covered task.

The evaluator should utilize a covered task evaluation checklist or procedure to ensure accurate and consistent assessment when performing an oral examination, on-the-job performance observation, or an on-the-job training observation.

The operator should determine the acceptable qualification criteria level for each covered task evaluation checklist, written examination, etc. The operator will need to determine what is acceptable performance during the evaluation. This can be in the form of a passing score for a written test and/or steps correctly completed during a performance evaluation.

Although training an individual to perform a covered task may be conducted individually or in a group, the evaluation process should be completed on an individual basis. Written evaluations may be given in a group setting, however the evaluation should reflect an individual's ability.

5.6.2 Subsequent Evaluation (re-evaluation)

The rule addresses certain conditions that require re-evaluation when any of the following apply:

- when the time interval, as established by the operator, has expired;
- if there is reason to believe the individual's performance of a covered task contributed to an accident; or
- if there is reason to believe an employee is no longer able to perform a covered task.

These are discussed in the sections below.

Time Interval

The regulation requires the operator to determine the time intervals appropriate for re-evaluation. Time intervals for subsequent evaluations may be based on:

- the frequency of performance of the covered task
- the complexity of the task
- the risk and consequences involved if the task is incorrectly performed

Tasks that are performed frequently and have low risk may have longer re-evaluation periods than tasks performed infrequently and have high risk. For example, a covered task that is:

- performed infrequently, is highly complex, and has severe consequences (high risk) may require frequent re-evaluation.
- performed weekly or more often and has a low degree of complexity with moderate to low consequences may require infrequent re-evaluation.

Establish the subsequent evaluation intervals and list them in the written program.

In Response to an Accident

The pipeline operator should evaluate an individual if the pipeline operator has reason to believe the individual's performance of a covered task contributed to an accident as defined in 49 CFR Part 195. An accident investigation should be performed to determine if an individual contributed to the accident and needs to be re-evaluated. The root cause analysis may also indicate if other individuals performing the same covered task need additional training to prevent recurrence of the same error.

The re-evaluation should sufficiently address both the knowledge and skill components of the covered task to ensure that the individual has been properly re-evaluated. Finally, all re-evaluations must be documented. Paragraph 5.10 provides information on record keeping.

☛ Employee is No Longer Able to Perform a Covered Task

5.7 Communicating Changes in Covered Task Procedures

When there is reason to believe that an individual may no longer be able to perform a covered task, re-evaluated and re-qualification prior to performing the covered task should occur. Examples of when this may occur are listed below.

- The individual has spent excessive time away from the job due to a disability, special assignment, or a change in job duties. (The specific time period established by the operator should be reflected in this part of the program.)
- The individual displays unsatisfactory performance of a covered task.
- There are significant changes to equipment or procedures.

The rule requires that the qualification program include provisions for communicating changes that affect covered tasks to individuals performing those affected covered tasks. When significant changes occur, the operator should consider whether additional qualification requirements are necessary and whether individuals performing the covered task should be evaluated again.

A management of change (MOC) process should be in place to keep individuals properly informed of changes in the procedures for covered tasks. A management of change process may be used in the cases listed below.

- Modifications to company policies or procedures
- Changes in State or Federal regulations
- Utilization of new equipment and/or technology
- New information from equipment or product manufacturers.

As part of the MOC process, all applicable training documentation and evaluation materials should be updated to reflect the changes.

5.8 Non-Qualified Individuals

There may be instances when non-qualified individuals are utilized to perform covered tasks (new employees in training, temporary employees assisting full-time employees, contractor personnel, etc.). In such situations, a non-qualified individual may perform the covered task provided a qualified person is directing and observing the non-qualified individual.

Below are some factors to consider when qualified persons are supervising non-qualified individuals.

- The qualified person must be close enough to each non-qualified individual to direct and observe his/her work and take immediate corrective action in the event an abnormal condition occurs. A qualified person can effectively observe multiple non-qualified individuals performing covered tasks in a close proximity area.
- There should be no obstructions or distance between the non-qualified individuals and the qualified person which would impede the qualified person's ability to directly observe and take immediate corrective action.

5.9 Contractor Personnel

The operator is responsible for ensuring the qualifications of contractor personnel performing covered tasks under 49 CFR Part 195 just as it is responsible for ensuring the qualifications of its own employees.

Contractor personnel may be qualified to perform covered tasks under the operator's qualification program. In addition, contractor personnel can be qualified under their own qualification program or a third-party qualification program provided the applicable qualification program has been approved by the operator and referenced in the operator's written program.

Non-qualified contractor personnel may perform covered tasks if directed and observed by a qualified person. The qualified person may be an operator's employee, an operator's representative (third-party inspector), or a contractor representative (refer to paragraph 5.8).

5.10 Record Keeping

Records on individuals and covered tasks should include the following:

- the qualified individual's name and/or employee/contractor number;
- the covered tasks that the individual is qualified to perform;
- the date(s) of current qualification; and
- the qualification method.

Retain documentation (such as the graded examination or an on-the-job training evaluation checklist) to support the evaluation procedure for a minimum of five years from the qualification date. Also, qualification documentation must be kept for five years after an individual stops performing covered tasks (refer to 49 CFR Part 195.507(b)).

See Appendix G for an example Qualification Record Sheet.

6. Program Maintenance

The qualification program should be evaluated periodically to verify its effectiveness. Changes to covered tasks, evaluation methods, evaluation materials, and associated training materials should be made as needed. The frequency that the operator establishes to evaluate the qualification program should be reflected in this section of the written program.

APPENDIX A – DISCUSSION OF THE RULE
(Excerpted from the DOT Document Published in the Federal Register August 27, 1999)

Qualification of Liquid Pipeline Personnel

This rule requires pipeline operators to develop and maintain a written qualification program for individuals performing covered tasks on pipeline facilities. The intent of this qualification rule is to ensure a qualified workforce and to reduce the probability and consequence of incidents caused by human error.

This rule

- creates new subparts in the gas and hazardous liquid pipeline safety regulations,
- establishes qualification requirements for individuals performing covered tasks, and
- amends certain training requirements in the hazardous liquid regulations.

The rule became effective October 26, 1999.

Introduction

The objective of this rule is to reduce the risk of accidents on pipeline facilities attributable to human error and provide an additional level of safety.

The rule

- requires operators of pipelines to develop a written qualification program to evaluate an individual's ability to perform covered tasks and to recognize and react to abnormal operating conditions that may occur while performing covered tasks;
- sets record-keeping requirements that operators must comply with to successfully demonstrate compliance; and
- provides the information that must be maintained on each individual evaluated and deemed qualified to work on a pipeline facility.

This rule allows operators with existing programs to modify those programs, as necessary, to ensure compliance with the minimum requirements of this rule. The rule also requires those operators without any qualification program to establish a program to evaluate the qualifications of individuals performing certain operation and maintenance activities on pipeline facilities that could affect pipeline operation or integrity.

The following sections provide the applicable regulatory citation in the left column with guidance in the right column.

THE RULE

49 CFR Part 195 Subpart N – Amended §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 proper use of firefighting procedures and equipment, fire suits, and breathing apparatus by utilizing, 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.
- (c) Each operator shall require and verify that its supervisors maintain a thorough knowledge of that portion of the emergency response procedures established under §195.402 for which they are responsible to ensure compliance.

GUIDANCE

Previously Section 195.403 prescribed the training requirements for operations, maintenance, and emergencies for operators of hazardous liquid pipelines. The operator qualification rule under subpart G includes a qualification process for operations and maintenance activities, but does not include emergency response qualification requirements. Therefore, 49 CFR §195.403 was amended to address only emergency response activities. This section becomes effective October 28, 2002.

This rule removes the specific operations and maintenance training requirements previously addressed in §195.403. Persons performing operations and maintenance tasks must be qualified in accordance with the new rule.

THE RULE	GUIDANCE
49 CFR Part 195 Subpart G – Added §195.501 Scope. (a) This subpart prescribes the minimum requirements for operator qualification of individuals performing covered tasks on a pipeline facility.	The Accountable Pipeline Safety and Partnership Act of 1996 required RSPA to adopt regulations requiring that “all individuals who operate and maintain pipeline facilities shall be qualified to operate and maintain the pipeline facilities” and that employers “shall address the ability [of individuals] to recognize and react appropriately to abnormal operating conditions that may indicate a dangerous situation or a condition exceeding design limits.” Such a system offers the advantages of national consistency, including the ability of contractor employees to work for different operators under a single qualification regime. The mandate is met by a non-prescriptive, performance-based regulation requiring each operator to develop, or have developed, a written program for the qualification of individuals. This allows each program to be tailored to the unique operations and practices of each operator. Persons Covered by the Rule. This rule applies to operators subject to the requirements of 49 CFR Part 195. The rule also applies to all individuals who perform covered tasks, regardless of whether they are employed by the operator, a contractor, a sub-contractor, or any other entity performing covered tasks on behalf of the operator. Operators are Responsible for Identifying Covered Tasks. Because of large differences between operations of pipelines across the country, RSPA decided that a uniform list of covered tasks would not be useful and could result in overall increased costs. For example, some operators do not have transmission lines in their pipeline systems, others operate only distribution lines, and others do not have compressors, pump stations, or storage facilities. Some operators perform a large number of covered tasks, while other, smaller operators may have only a limited number of activities that would be classified as covered tasks. Identification of covered tasks is a key component of the qualification requirements under this rule. Suggested covered tasks are identified in Appendix C and Appendix D.

THE RULE	GUIDANCE
§195.501 Scope. (cont.) (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;	Identification of Covered Tasks. The rule includes a four-part test that each operator must use to determine whether an activity constitutes a covered task. These are shown as numbers 1 – 4 to the left. Each is discussed in detail below. The words "identified by" means the selection of covered tasks by the operator. The authority to allow pipeline safety regulators to require modifications to programs that fail to meet regulatory requirements is within the scope of federal and state jurisdiction, as is the authority to question particular activities included as covered tasks by the operator. The operator of a pipeline facility is responsible for identifying which activities performed on that facility are covered tasks. The criteria for identifying such covered tasks on hazardous liquid pipelines are set forth in §195.501. Although operators are responsible for identifying covered tasks for which individuals must be qualified, pipeline safety regulators remain responsible for reviewing operator qualification programs and ensuring that federal regulatory standards are applied and met nationwide. Regulators may question an operator's inclusion or exclusion of particular activities as covered tasks. Regulators may require modifications to programs that fail to meet the requirements of the rule. Tasks Performed on a Pipeline Facility. The phrase "performed on a pipeline facility" means an activity that is performed by an individual whose performance directly impacts the pipeline facility. An individual who works on a pipeline component that is physically connected to the pipeline system is performing work "on a pipeline facility" and may be subject to the rule, regardless of whether or not product is flowing through the pipeline. However, a person who repairs a pipeline component or appurtenance that has been removed from the system is not performing work on the pipeline and, therefore, would not be performing a covered task.

THE RULE

§195.501 Scope. (cont.)

(2) Is an operations or maintenance task;

GUIDANCE

Operations or Maintenance Tasks. The act requires that all individuals who operate and maintain pipeline facilities be qualified to operate and maintain those facilities (49 U.S.C. Section 60102(a)(1)(C)).

Most of the operations and maintenance activities on pipeline facilities are found in 49 CFR Part 195, Subpart F. In addition, the regulations contain other subparts that include requirements for conducting operations and maintenance activities.

For example, monitoring corrosion control systems in accordance with requirements is an operations activity. Taking corrective action as required when deficiencies are found in a corrosion control program is a maintenance activity. Therefore, repairing pipelines affected by corrosion is also a maintenance activity.

Certain tasks performed on pipeline facilities may be covered tasks when performed in the course of operation and maintenance activities but not be covered tasks in the course of other activities. For example, "welding" could be a covered task when performed as an operations and maintenance activity on a pipeline, such as when installing a weld-over sleeve to repair an anomaly. However, "welding" is not a covered task under this subpart when performed during the fabrication of new installations because this would not be an operations and maintenance task.

However, welders are currently subject to qualification requirements in 49 CFR Part 195, Subpart D. To comply with the rule, welders would have to be qualified to recognize and react to abnormal operating conditions when performing welding as a covered task.

THE RULE

§195.501 Scope. (cont.)

- (3) Is performed as a requirement of this part; and

- (4) Affects the operation or integrity of the pipeline.

GUIDANCE

Tasks Performed Pursuant to a Requirement in 49 CFR

Part 195. Covered tasks include only those operations and maintenance activities required by 49 CFR Part 195.

Examples of covered tasks might include:

- inspecting navigable water crossings under §195.412 and
- inspecting breakout tanks under §195.432.

Operators of pipeline facilities may voluntarily conduct operations and maintenance activities that are not required by a specific provision in 49 CFR Part 195. However, an activity does not necessarily become a covered task simply because an operator develops procedures for conducting the activity and includes those procedures in its Operations and Maintenance Program.

For example, an operator may voluntarily choose to maintain a customer's buried piping. It includes procedures for such maintenance activity in its Operations and Maintenance Program. Because such maintenance is not specifically required by 49 CFR Part 195, the associated maintenance activities are not covered tasks.

Tasks Affecting the Operation or Integrity of the Pipeline.

Under the rule, covered tasks include only those activities that affect the operation or integrity of the pipeline.

It is important to clarify the term “operation” as used here in the safety context of normal versus abnormal operation, where the latter could result in an unsafe condition. For example, the control of flow and pressure in pipelines could result in abnormal operation if the pressure is allowed to rise above an acceptable limit. Therefore, in this example, activities that include controlling flow and pressure on a pipeline system would be considered covered tasks if the other three criteria for covered tasks were met.

The “integrity” of the pipeline refers to the pipeline’s ability to operate safely and to withstand stresses imposed during operations. An example of a short-term effect on integrity would be exceeding the

THE RULE	GUIDANCE
§195.501 Scope. (cont.)	Maximum Operating Pressure (MOP) for liquid pipelines. An example of a long-term effect would be failure from corrosion due to improper coating after repair of a welded joint. An additional example of a task affecting the integrity of the pipeline would be coating or jacketing of aboveground pipeline components. In the event atmospheric corrosion is present, coating or jacketing the component could affect the integrity of the pipeline. However, painting a pipeline for aesthetic reasons would not affect the integrity of the pipeline. In identifying covered tasks, operators must consider specific activities and not the job classification of individuals performing the activities, since each job classification may incorporate several activities. For example, an individual with the job classification "meter reader" may be assigned activities other than reading a meter that could be covered tasks; and that individual would need to be qualified for those covered tasks.

EXAMPLES USING THE CRITERIA.

The following are hypothetical examples of how the four-part test can be used to identify a covered task.

If an activity fails to meet any of the four criteria, the activity would not be considered a covered task under this rule.

EXAMPLE #1: MEASURING PIPE-TO-SOIL POTENTIALS

1. Is it performed on a pipeline facility?

Yes, pipe-to-soil potentials are measured at cathodic test stations attached directly to the pipeline.

2. Is it an operations and maintenance task?

Yes, pipe-to-soil potentials are read in the course of pipeline operations and maintenance activities.

3. Is it performed as a requirement of this part?

Yes, pipe-to-soil potential measurements are required by 49 CFR §195.416.

4. Does it affect the operation or integrity of the pipeline?

Yes, pipe-to soil potential measurements, if taken improperly, will not accurately reflect the level of cathodic protection being provided. While not affecting the immediate operation of the pipeline, the future integrity of the pipeline might be jeopardized (for example, corrosion might develop) if inadequate cathodic protection is applied to the pipeline over a period of time.

Since all four criteria are met, the measurement of pipe-to-soil potentials is a covered task.

EXAMPLES USING THE CRITERIA.

The following are hypothetical examples of how the four-part test can be used to identify a covered task.

If an activity fails to meet any of the four criteria, the activity would not be considered a covered task under this rule.

EXAMPLE #2: METER READING

1. Is it performed on a pipeline facility?

Yes, a meter is a part of a pipeline facility.

2. Is it an operations and maintenance task?

Yes, meters are read in the course of pipeline operations and maintenance activities.

3. Is it performed as a requirement of this part?

No, meter reading is not a requirement of Part 195.

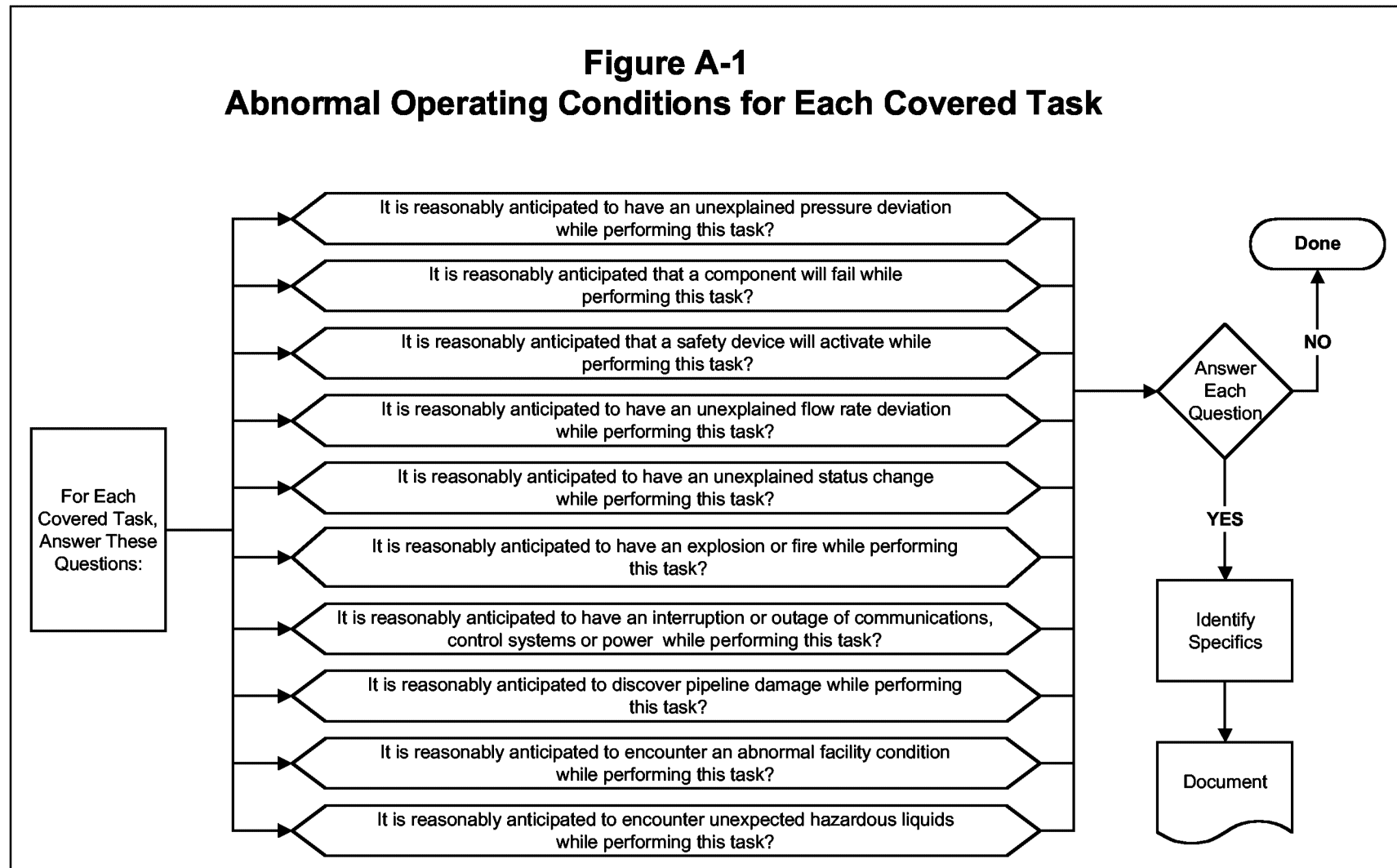
4. Does it affect the operation or integrity of the pipeline?

No, meter reading has no impact on pipeline operation or integrity.

Because meter reading fails to meet at least one of the four criteria, meter reading is not considered a covered task.

THE RULE	GUIDANCE
§195.503 Definitions. Abnormal operating condition means a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may: (a) indicate a condition exceeding design limits; or (b) result in a hazard(s) to persons, property, or the environment.	This definition is derived from the Accountable Pipeline Safety and Partnership Act of 1996 and codified in 49 CFR Part 195.402(d)(1)(v). “Abnormal operating conditions” is also referenced in the definition of the term “qualified” (see below). Not all atypical (unusual) operating conditions are abnormal. An example of an atypical operating condition that is not abnormal is a pipeline which can (not to exceed Maximum Operating Pressure (MOP)) operate up to 200 pounds per square inch (psig), but which typically operates at 50 psig. Operating this pipeline at 150 psig would be atypical, but not abnormal. If, however, the atypical operating condition could cause the pressure in the pipeline to exceed its allowable limits or cause a hazard to persons, property or the environment, an abnormal operating condition would result. A qualified individual performing control of pressure and flow who observes an unanticipated pressure increase in such a pipeline segment should know to investigate the cause of the change before it reaches the MOP of the line. Figure A-1 provides information on determining abnormal operating conditions for covered tasks.

Figure A-1
Abnormal Operating Conditions for Each Covered Task



THE RULE

Evaluation means a process, established and documented by the operator, to determine an individual's ability to perform a covered task by any of the following:

- (a) written examination
- (b) oral examination
- (c) work performance history review
- (d) observation during
- (e) performance on the job
- (f) on the job training
- (g) simulations
- (h) other forms of assessment

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The evaluation of an individual's qualifications should be an objective, consistent process that documents an individual's ability to perform the covered task. This includes the individual's ability to recognize and react to abnormal operating conditions that the operator could reasonably anticipate the qualified individual will encounter while performing the covered task.

The operator should establish the acceptance criteria for the evaluation method used (for example, for on-the-job training, spell out the performance criteria; for a written exam, establish the cutoff score). Although the definition lists several acceptable methods for evaluation, the list is not all-inclusive. Operators might select other methods.

The table in Appendix E shows acceptable evaluation methods for "transitional," "initial" and "subsequent" qualification.

Under §195.509(c), a work performance history review may not be used as a sole evaluation method after October 28, 2002.

"Transitional" qualification may rely on a work performance history review as the sole evaluation method.

"Initial" qualification may not rely on only a work performance history review.

"Subsequent" qualifications may rely on work performance history review if used in conjunction with at least one other evaluation method.

Prior to the October 28, 2000, operators may use work performance history review as the sole method for evaluation when qualifying individuals Who performed the covered task prior to August 29, 2002, if work performance history review is used, it must be combined with at least one other form of assessment. Any of the other forms of assessment specified in the definition of evaluation may be used as the sole method of evaluation both before and after the three-year compliance date. When an operator has qualified an individual prior to the three