

UNDERSTANDING DOT/PAM OPERATOR QUALIFICATION PROGRAM

Jesus Ramos

Southern Union Gas Company

504 Lavaca St. #800, Austin, TX 78701

INTRODUCTION

After a decade of deliberation between government and the pipeline industry, the action of the Notice of Proposed Rulemaking requiring qualification for individuals performing covered tasks on a pipeline facility is a reality. The synergistic efforts of the members of the Regulation Negotiation Committee resulted in the authoring of an acceptable proposed rule, Qualification of Pipeline Personnel. New Subparts to 192 and 195 are requiring pipeline operators to write a qualification program which identifies covered tasks, establishes evaluation methods, execute the evaluations to qualify individuals, preserve individual qualification, and maintain records of these activities. The written program must incorporate all the above requirements to accomplish the rule's intent of ensuring a qualified pipeline work force to curtail incident probability and consequences caused by human error. The Regulators have the responsibility, hence the authority, to review Qualification of Pipeline Personnel programs, ensure that federal regulatory standards are complied with nationwide and may question an operator's inclusion and/or exclusion of particular covered tasks. Program modifications may be required if it fails to meet rule requirements. The compliance time line is dependent on the Qualification of Pipeline Personnel Rule being published in the Federal Register which was August 27, 1999. The official compliance clock began when the rule was published in the Federal register. The operator must complete the written program by April 27, 2001 and must qualify all individuals performing on the pipeline facility by October 28, 2002. The primary advantage for the operator is that the operator writes a qualification program specific to his pipeline operating, maintenance and emergency response policies, procedures and practices. The impact on the operator will vary depending on what preparation the operator has accomplish to date. Those companies that waited for the final rule to be published in the Federal Register, may find themselves rushing to complete the minimum requirements before the deadlines. The indisputable impact of the operators' qualification program effectiveness will be manifested after Regulators critique the program or when a reportable incident is investigated.

WHO DESIGNED THE FINAL RULE?

This final rule is the product of a negotiated rulemaking in which representatives of all interested parties participated, including pipeline trade associations, pipeline operators both large and small, organized labor,

state pipeline safety representatives, and the Federal government. The members of the negotiated rulemaking committee agreed that this process ensured adoption of a cost-effective standard for pipeline personnel qualification.

THE OPERATOR QUALIFICATION RULE

One approach for an operator to scrutinize information to design an operator qualification plan may be to answer simple questions which may be asked by the regulator inspectors.

HAS THE OPERATOR REVIEWED THE PREAMBLE TO THE RULE?

The Preamble plays an important role describing the purpose and intent of the rule. It explains by example what is meant by the rule allowing Operators to understand how to comply with the rule. The Negotiation Committee determined the mandate would best be 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 would allow each program to be tailored to the unique operations and practices of each operator. What the rule requires the operator to demonstrate is the qualification of individuals performing operation and maintenance task on the pipeline. The rule is a 'qualification rule' compared to a 'training rule.' The rule's flexibility is that it allows operators to identify individuals who can perform the task based on criteria determined by the operator. If the individual possess the knowledge and ability to perform the task by these criteria, then the individual may be deemed qualified, upon evaluation, and no training will be required. If the individual does not meet these criteria, then training may be an option.

WHO IS COVERED BY THE RULE?

This final rule applies to operators subject to the requirements of 49 CFR parts 192 or 195. The rule 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.

WHAT IS A COVERED TASK?

To identify covered tasks, operators must consider specific activities and not necessarily the job classification of individuals performing the activities,

because 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, such as distribution line patrolling under 49 CFR Part 192.721, that could be a covered task. The rule includes a four-part test that each operator must use to determine whether an activity constitutes a covered task. A covered task is:

- 1) performed on a pipeline facility;
- 2) an operations or maintenance task;
- 3) performed pursuant to a requirement in 49 CFR part 192 or 195; and
- 4) affects the operation or integrity of the pipeline.

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

The following is hypothetical example of how the four-part test can be used to identify a covered task:

Example 1: Leakage surveys on gas transmission pipelines.

- (1) Performed on a pipeline facility? Yes, because leakage surveys are performed immediately above the pipeline and on the pipeline right-of-way.
- (2) Is an operations and maintenance task? Yes, leakage surveys are conducted in the course of pipeline operations and maintenance activities.
- (3) Is performed as a requirement of this part? Yes, leakage surveys are required by 49 CFR 192.706 and 192.723.
- (4) Affects the operation or integrity of the pipeline? Yes, if a leakage survey is not properly conducted, a leak might not be detected, resulting in a potentially hazardous situation.

Since all four criteria are met, the leakage survey is a covered task.

WHO IS RESPONSIBLE FOR IDENTIFYING THE COVERED TASKS?

Under the rule, the operator is responsible for identifying which activities performed on the pipeline facility are covered tasks. Identification of covered tasks is a key component of the qualification requirements under the final rule. The Negotiation Committee proposed that it would be more effective and practical to let each operator determine the covered tasks requiring qualification.

WHO IS RESPONSIBLE FOR REINFORCEMENT OF THE RULE?

Although operators are responsible for identifying covered tasks for which individuals must be qualified, 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 and exclusion of particular activities as covered tasks. Regulators may require modifications to programs that fail to meet the requirements of the rule.

WHAT IS A PIPELINE FACILITY?

Because the term "pipeline facility" was used in the first covered task criterion, the Committee also considered whether it would be appropriate to use the term "pipeline facility" in the fourth criterion instead of the term "pipeline." Although some argued that consistency should be maintained, others stated that the primary goal of the final rule is to ensure the operation and integrity of the pipeline itself. Furthermore, the term "pipeline" as defined in 49 CFR parts 192 and 195 already encompasses the "facilities" targeted by the final rule. The 192.3 definition of a pipeline facility means new and existing pipelines, rights-of-way, and any equipment, facility, or in the treatment of gas during the course of transportation.

WHAT DOES TASKS PERFORMED ON A PIPELINE FACILITY MEAN?

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 final rules, regardless of whether or not product is flowing through the pipeline. However, a person who repairs a pipeline system or appurtenance, that has been removed from the system, would not be performing work on the pipeline, and therefore would not be performing a covered task.

WHAT IS AN OPERATIONS OR MAINTENANCE TASK?

Most of the operations and maintenance activities on pipeline facilities are found in 49 CFR part 192, subparts L and M, or 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, part 192, Subpart I, establishes requirements for protecting metallic pipelines from external, internal, and atmospheric corrosion. The requirements to monitor corrosion control systems are operations activities. The requirements to take corrective action when deficiencies are found in a corrosion control program are maintenance activities. 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 may 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 192, Subpart E, and Part 195, Subpart D. To comply with the final rule, welders would have to be additionally qualified to recognize and react to abnormal operating conditions when welding as a covered task. This also applies to other activities such as “plastic pipe joining,” for which the regulations contain specific requirements.

HOW WILL AN OPERATOR TELL IF A TASK IS PERFORMED PURSUANT TO A REQUIREMENT IN 49 CFR PART 192 OR 195?

Covered tasks include only those operations and maintenance activities required by 49 CFR Part 192 or 195.

Examples of covered tasks might include: purging a pipeline because it is specifically required by 49 CFR 192.629; leakage surveys of distribution lines, required by 49 CFR 192.723; starting, operating, and shutting down gas compressor units, because 49 CFR 192.605(b)(7) specifically requires written procedures on these activities, to provide safety during maintenance and operations; inspection of navigable water crossings under 49 CFR 195.412; and inspection of breakout tanks required by 49 CFR 195.432. Operators of pipeline facilities may voluntarily conduct operations and maintenance activities that are not required by a specific provision in 49 CFR parts 192 or 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 Plan. For example, an operator may voluntarily choose to maintain a customer’s buried piping, and include procedures for this activity in its Operations and Maintenance Plan. Because such maintenance is not specifically required by 49 CFR parts 192 or 195, the associated maintenance activities are not covered tasks.

WHAT ARE TASKS AFFECTING THE OPERATION OR INTEGRITY OF THE PIPELINE?

Under the final rule, covered tasks include only those activities that affect the operation or integrity of the pipeline. The main purpose of the final rule is to ensure safety of pipelines through qualification of individuals. Initial discussions centered around safety-related activities and the need to categorize covered tasks as only those activities having safety implications. Some Committee members argued that most of the provisions in parts 49 CFR 192 and 195 regulate safety-related activities. It would therefore be redundant to include the word “safe” on pipeline operations addressed under this criteria. Therefore, it was decided to use the phrase, “operation or integrity,” because some activities do not adversely affect the operation or integrity of the pipeline,

even though they meet the other three criteria. The Committee decided to include a fourth criteria that must be satisfied for an activity to be a covered task, namely that the activity affects the operation or integrity of the pipeline. The Committee discussed 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.

An additional example of an activity 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.

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 Maximum Allowable Operating Pressure (MAOP) for gas pipelines and 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.

DO OPERATORS NEED TO QUALIFY THE INDIVIDUALS PERFORMING THE EVALUATIONS?

The Committee discussed the role of those performing evaluations. Members agreed not to include a provision in the rule to require that evaluators be “qualified” to evaluate. However, persons performing evaluations should possess the required knowledge (1) to ascertain an individual’s ability to perform covered tasks and (2) to substantiate an individual’s ability to recognize and react to abnormal operating conditions that might surface while performing those activities. This does not necessarily mean that the persons performing evaluations should be physically able to perform the covered tasks themselves. The Committee discussed the concerns and options available to the operator regarding who should evaluate the individuals performing covered tasks. Because the operator is responsible for the development and implementation of the evaluation methods, the Committee thought that the operator should also be responsible for selecting appropriately knowledgeable individuals to perform evaluations. The final rule requires a qualification program that focuses on ensuring an individual can properly perform a covered task(s) rather than the credentials of persons conducting evaluations.

DOES CONTRACTOR PERSONNEL HAVE TO BE QUALIFIED?

The Committee discussed contractor personnel and who is responsible for their qualification and compliance under this rule. Some members believed contractors should not be subject to this final rule and that OPS should be responsible for ensuring the qualification of contractor personnel. OPS does not have the authority to directly enforce compliance by contractors with this rule. The pipeline operator is responsible for all individuals working on their pipeline systems. This includes operator and contractor personnel.

DOES THE OPERATOR UNDERSTAND THE RULE'S NEW TERMINOLOGY?

The Preamble has a definitions section to the final rule which was developed to facilitate common understanding of key terms. The Committee began using a number of terms that were not commonly defined by all members. To facilitate communication, these terms were defined and are provided in the final rule:

ABNORMAL OPERATING CONDITION

An abnormal operating condition, as defined by the final rule, is "a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may:

- 1) indicate a condition exceeding design limits; or
- 2) result in a hazard(s) to persons, property, or the environment."

This definition is derived from Federal pipeline safety law (49 U.S.C. 60102) and from the pipeline safety regulations (49 CFR 192.605 (c)(1)(v) and 49 CFR 195.402(d)(1)(v)). "Abnormal operating conditions" is also referenced in the definition of the term "qualified." To be qualified, an individual needs to be able to properly perform assigned covered tasks and be able to recognize and react to an abnormal operating condition that may be encountered while performing the covered task. For example, this may include notifying the responsible parties or taking corrective action to mitigate the condition. As an example, an individual who has been qualified to perform leak surveys should be able to recognize and react to an abnormal operating condition such as blowing gas. Likewise, an individual who is qualified to perform control of gas pressure and flow should be able to recognize and react to an abnormal operating pressure in a pipeline segment. Not all atypical operating conditions are abnormal. An example of an atypical operating condition that is not abnormal is a pipeline which can (not to exceed MAOP or MOP) operate up to 200 psig, but which typically operates at 50 psig. Operating this pipeline at 150 psig could be atypical, but not abnormal. If however the atypical operating condition would 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 gas 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 MAOP/MOP of the line.

EVALUATION

An evaluation of an individual's ability to perform a covered task is the process that assesses and documents the individual's qualifications to perform the covered task. Although the definition lists several acceptable methods for evaluation, the list is not all-inclusive. 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). The Preamble provides a table to illustrate acceptable evaluation methods for "transitional," "initial" and "subsequent" qualification, although these terms do not appear in the rule. "Transitional" qualification means qualification completed by October 28, 2002, of individuals who have been performing a covered task on a regular basis prior to August 27, 1999. "Initial" qualification means qualification, at any time, of individuals who were not performing a covered task on a regular basis prior to the effective date of the rule. "Subsequent" qualification means evaluation of an individual's qualification, after "transitional" or "initial" qualification, at the interval established by the operator.

QUALIFIED

Qualified, means that an individual has been evaluated and is able to properly perform a covered task(s), and recognize and react to abnormal operating conditions that may be encountered during the performance of the covered task(s). An individual may be qualified using any of the evaluation methods specified in the operator's written qualification program.

DOES THE OPERATOR UNDERSTAND THE LIMITATIONS OF THE WORK PERFORMANCE HISTORY REVIEW?

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 October 28, 2002 operators may use work performance history review as the sole method for evaluation when qualifying individuals. After October 28, 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 October 28, 2002 date. When an operator has qualified an individual prior to the three year compliance date and used work performance history review as the sole method of evaluation, the operator is not required to re-evaluate each individual using additional criteria until the next scheduled evaluation, which may vary by covered task. The operator must establish the parameters for the work performance history review. For example, a work performance history review may include:

- 1) a search of existing records for documentation of an individual's past satisfactory performance of a covered task(s);
- 2) verification that the individual's work performance history contains no indications of substandard work or involvement in an incident (part 192) or accident (part 195), caused by an error in performing a covered task; and,
- 3) verification that the individual has successfully performed the covered task on a regular basis before August 27, 1999, the effective date of the rule.

WHAT ARE THE ELEMENTS OF A WRITTEN QUALIFICATION PROGRAM?

The written program must identify the following seven elements as requirements in the operator's qualification program:

- 1) The rule requires operators to identify the covered tasks to be included in the qualification program. Whether an activity is a covered task would be determined using the four part test specified in the rule. Because operators are responsible for identifying covered tasks, variations among qualification programs are expected. To ensure the accuracy of its covered task list a periodic review of covered tasks should be required. Although a periodic review requirement was not included in the final rule, an operator may consider the review.
- 2) The rule requires that the qualification program include provisions to ensure through evaluation that individuals performing covered tasks are qualified. This would set forth the evaluation methods to determine if an individual is qualified.
- 3) The rule allows for performance of covered tasks by individuals who are not qualified as long as a qualified individual directly observes the

non-qualified individual(s), and is able to take immediate corrective actions when necessary. For example, an operator may use a three-person crew to repair gas leaks. Two of the crew members could be non-qualified. The crew excavates and repairs leaking gas mains and services under the direct and close observation of the qualified member of the crew. The intent of this provision is to ensure that non-qualified individuals performing covered tasks are subject to close observation by a qualified individual. Ultimately, the qualified member of the crew is responsible for the repair. The ratio of non-qualified individuals to "qualified" individuals should be kept to a minimum.

- 4) The rule requires the operator to evaluate an individual if the operator has reason to believe that the individual's performance of a covered task could have contributed to an incident as defined in 49 CFR part 191 or accident as defined in 49 CFR part 195. If so, the individual's qualification should be evaluated to determine if the individual continues to be qualified to perform the covered task.
- 5) The rule requires the operator to evaluate an individual if the operator has reason to believe that the individual's performance of a covered task could have contributed to an incident as defined in 49 CFR part 191 or accident as defined in 49 CFR part 195. If so, the individual's qualification should be evaluated to determine if the individual continues to be qualified to perform the covered task. This paragraph of the rule requires the operator to evaluate an individual if there is reason to believe that the individual is no longer qualified to perform a covered task. This could occur if the individual displays unsatisfactory performance of the task or if there is reason to believe the individual can no longer perform the covered task. The operator's qualification program must include provisions for evaluating an individual's qualification if the circumstances warrant.
- 6) The rule recognizes that changes may occur that impact how a covered task is performed. Changes that may need to be communicated to individuals performing covered tasks may include:
 - 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.

The final rule requires that the qualification program include provisions for communicating

information on substantive changes to the individuals performing the 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.

- 7) The rule requires operators to address the identification of covered tasks, and the frequency of evaluation intervals for each covered task. The appropriate interval may vary depending on the covered task. It was therefore left to the operator to determine which covered tasks and the interval at which subsequent qualification of an individual performing a covered task will occur. The Committee felt that the evaluation intervals could be specified in units of time, frequency of performance or other appropriate units. The Committee recognized that subsequent evaluation methods may differ from initial qualification methods.

DOES THE RULE REQUIRE THAT THE WRITTEN PROGRAM BE A PART OF THE O & M PLAN?

This rule does not require that the written qualification program be incorporated into an operator's Operations and Maintenance Plan. The operator may expand any of the seven required elements and add additional elements to their program but will only be held accountable to meet the requirements of this Subpart.

WHAT IS ACCEPTABLE RECORD KEEPING FORMAT?

The records may be kept in paper, electronic, or any other appropriate format. The records may be kept at a central location or at multiple locations. The final rule does not address whether a certification or other record of qualification need be issued to each qualified individual. This matter is solely within the discretion of the operator.

WHAT KIND OF INFORMATION IS REQUIRED IN THE RECORD?

The records that support an individual's qualifications must include the identity of each qualified individual (for example, name, social security number, or employee number), identification of each covered task for which qualified, date(s) of current qualification and qualification method(s). Records of an individual's current qualifications must be maintained while the individual is performing the covered tasks for which qualified. When an individual is evaluated for subsequent qualification, the prior qualification records must be maintained for a period of five years. Also, when an individual stops performing a covered task (for example, the individual retires or is promoted) the individual's qualification records must be retained for a period of five years. The Committee selected five years to be consistent with other regulatory time periods.

ARE THERE OTHER BENEFITS TO THE RULE?

There are non-quantifiable benefits that could translate into reduced operating expenses. Other non-quantifiable benefits of this rule may include:

- 1) Reducing the likelihood of incorrectly following procedures;
- 2) Eliminating and correcting inadequate operating and maintenance procedures;
- 3) Reducing or eliminating the occurrence of sending inadequately prepared individuals into the field to perform covered tasks;
- 4) Increasing the formal communications between operator and workers;
- 5) Increasing the attention and oversight on safety-related procedures; and
- 6) Improving the documentation that ensures a qualified workforce.

192 SUBPART N

192.801 Scope.

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

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.

Sec. 192.803 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.

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, or
- (g) Simulations; or
- (h) Other forms of assessment.

- (3) Date(s) of current qualification; and
- (4) Qualification method(s).

(b) Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

Qualified means that an individual has been evaluated and can:

- (a) Perform assigned covered tasks; and
- (b) Recognize and react to abnormal operating conditions.

Sec. 192.805 Qualification program.

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

- (a) Identify covered tasks;
- (b) Ensure through evaluation that individuals performing covered tasks are qualified;
- (c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;
- (d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Part 191;
- (e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task;
- (f) Communicate changes that affect covered tasks to individuals performing those covered tasks; and
- (g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed.

Sec. 192.807 Recordkeeping.

Each operator shall maintain records that demonstrate compliance with this subpart.

- (a) Qualification records shall include:
 - (1) Identification of qualified individual(s);
 - (2) Identification of the covered tasks the individual is qualified to perform;

Sec. 192.809 General.

- (a) Operators must have a written qualification program by April 27, 2001.
- (b) Operators must complete the qualification of individuals performing covered tasks by October 28, 2002.
- (c) Work performance history review may be used as a sole evaluation method for individuals who were performing a covered task prior to August 27, 1999.
- (d) After October 28, 2002, work performance history may not be used as a sole evaluation method.

CONCLUSION

Other questions should be asked by an operator to outline an approach for writing the Operator Qualification Program. The important particulars the program must contain are the processes that will guide an inspector to conclude that the operator not only understands the rule and how to ensure a qualified individual is performing a covered task, but also has a defined mechanism to demonstrate compliance with the rule. Reading and understanding the rule's Preamble will aid in scrutinizing information to ensure the next step, writing the plan, will be a acceptable one. Many associations and private businesses can be contacted for help. All operators should have an open dialogue with their state regulatory agency to avoid severe last minute surprises. The next milestone is April 27, 2001, when an Operator must have the written plan to present to regulators.

REFERENCE

This discussion is supported by the Department of Transportation, Research and Special Programs Administration Docket No. PS-94; Qualification of Pipeline Personnel. Many of the issues were discussed in Pipeline Employee Performance Group meetings facilitated by the Transportation Safety Institute.