

## White Paper on OPS Distinctions between the Terms Requalification and Reevaluation

Pipeline operators and the pipeline regulatory community have often used the terms “requalification” and “reevaluation” interchangeably when referring to the process for periodically verifying that individuals performing covered tasks remain qualified in accordance with Operator Qualification (OQ) program requirements. The purpose of this paper is to establish what these terms mean in light of the OQ Rule, requirements of the U.S. Congress, OPS definitions and FAQs on OQ, and dictionary definitions, and discuss other considerations that need to be part of the periodic verification process.

### Regulatory Requirements and OPS Positions

#### 49 CFR

49 CFR 192.803/195.503, Definitions, reads, in part (emphasis added),

“ . . . Qualified means that an individual has been *evaluated* and can . . . [p]erform assigned covered tasks. . . and . . . [r]ecognize and react to abnormal operating conditions.

“ . . . 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:
  - performance on the job,
  - on the job training, or
  - simulations; or
- (e) other forms of assessment.

#### PSIA 2002

Section 13 of the 2002 Pipeline Safety Improvement Act (PSIA), states, in part (emphasis added):

“(d) Elements of Qualification Programs.--A qualification program adopted by an operator under subsection (a) shall include, at a minimum, the following elements:

(1) *A method for examining or testing the qualifications* of individuals described in subsection (a). The method may include written examination, oral examination, observation during on-the-job performance, on-the-job training, simulations, and other forms of assessment. The method may not be limited to observation of on-the-job performance, except with respect to tasks for which the Secretary [of the Department of Transportation] has determined that such observation is the best method of examining or testing qualifications. The Secretary shall ensure that the results of any such observations

are documented in writing.

(2) ...

(3) [A periodic requalification component that provides for examination or testing of individuals](#) in accordance with paragraph (1).

(4) ...

Evaluation is defined in Webster's Dictionary as "a determination" or "appraisal"; "examine" can be defined as, "to test the knowledge and ability, reactions, or qualifications of an individual as by questions or assigning tasks".

### **FAQ's for Operator Qualification (OQ Website)**

FAQ 2.9 What capabilities should be evaluated to qualify an individual to perform covered tasks?

The qualification process should include the following factors: (1) the individual's knowledge of the task (e.g., information imparted through self-study, classroom training or CBT); (2) her or his skill in performance of the task (e.g., craftsmanship in performing the steps of the task); and (3) his or her ability (proficiency, comprised of "physical capability"; e.g., vision, strength, agility, or "mental ability"; e.g., comprehension and understanding) is to perform the covered task. The rule addresses acceptable means for evaluating these capabilities.

### **Glossary for Operator Qualification (OQ Website)**

#### ***Evaluation***

As defined in '192.803 and '195.503. [Note: Any evaluation of an individual's qualifications must follow an objective, consistent process that documents the individual's ability to perform the covered task, including the ability to recognize and react to AOCs.]

#### **Discussion**

It is clear from the above examples that OPS and Congress intended that evaluation be a process of measuring, testing or examining an individual's knowledge, skills, and abilities in order to determine if the individual is qualified to perform assigned covered tasks. By the definition of "qualified" used in the regulations, this evaluation process is extended to include an evaluation of the individual's ability to recognize and react to abnormal operating conditions (AOCs).

This is all very clear when one places it in the context of the initial qualification process, when individuals have not previously been qualified. It apparently has been less than clear to some operators what the requirements are for verifying that an individual remains qualified over time, although 192.805(g)/195.505(g) specifies that the written program must "Identify those covered tasks and the intervals at which evaluation of the

individual's qualifications is needed.” The PSIA 2002 more clearly requires that a periodic requalification component be identified in operator programs (see the quote of paragraph (d)(3), above).

Requalification (or subsequent qualification, as discussed in the OQ Rule preamble) is a difficult term for many operators to understand, because they consider that an individual, once qualified, remains qualified unless and until there is reason to suspend or revoke that qualification (e.g., involvement in an incident or accident while performing a covered task, failure of an evaluation process for qualification, lapse of qualification because the interval for requalification has been exceeded, other reasons for suspending or revoking a qualification). This is a terminology issue, and whatever it is called, it does not remove the requirement under the regulations to periodically evaluate a qualified individual and verify that he or she remains qualified.

Almost all operator programs inspected to date require a periodic evaluation for qualification of each individual for each covered task they are qualified to perform. These periods typically range from one year to five years (excluding those tasks which have a regulatory-based certification requirement, such as welding and plastic joining), depending on the operator and the task being evaluated. OPS has encouraged operators to establish task-specific intervals for periodic evaluation based on an analysis or evaluation of the risk, complexity and frequency of performance of the task. In this type of analysis, a task with high risk, high complexity and low frequency of performance will have the shortest interval, while a task with low risk, low complexity and high frequency of performance will have the longest interval.

OPS has generally accepted intervals that are no longer than five years, especially when they result from an analysis of the type described above. Several operators have proposed longer intervals (up to seven years), but have not provided a rational basis for this length. The predominant interval for most tasks has been three years, and has been selected by many operators based on OSHA process hazards analysis intervals.

There are no definitive studies that have been performed by the pipeline industry or OPS to establish what the “right” interval should be; as the program matures over time, and information from the requalification processes is accumulated, a basis for lengthening or shortening the selected intervals for tasks may be established. In the interim, both industry and the regulatory community are comfortable with the one to five year range.

OPS and industry have discussed the concept of using “performance monitoring” as an evaluation alternative to periodic evaluation for qualification at fixed intervals. It has been proposed that “continuous” monitoring of an individual while performing a covered task (e.g., for infrequently performed tasks, every time the task is performed; for frequently performed tasks, once every six to twelve months) could be used in lieu of a periodic evaluation for qualification. While this is an attractive and desirable concept that would ensure task knowledge, skills and abilities remain at an acceptable level, there are several practical drawbacks to this approach. One is that the performance monitoring tool to be used as an evaluation of the individual’s continuing knowledge, skill and

ability would have to contain all of the features of the methods used for periodic evaluation in order to be effective (e.g., a knowledge-based component that could be achieved through interactive questioning of the individual while performing the task, a skill-based and ability-based component that could be achieved through observation of task performance and verification of adherence to procedures, and a knowledge verification that individuals know how to recognize and react to AOCs applicable to the task). The second is the workload imposed on the performance evaluators (crew chiefs, foremen, supervisors, etc.) to monitor every task performed by every individual and document the monitoring results, as well as the likelihood that not every task for which the individual is qualified can be monitored at a frequency acceptable to OPS (due to some tasks being performed infrequently, or time and duty constraints of the evaluator). Small municipal operators that have supervisors or managers with responsibilities for gas, water and sewer operations will no doubt find that periodic evaluations for qualification of individuals are much more effective and easier to manage for their operations than performance monitoring.

Another consideration is what type of evaluation methods should be used and what the scope of these methods should be when they are used for requalification as opposed to initial qualification. Most operators who established programs and qualified individuals to meet the required date of October 28, 2002, have not performed a requalification process because their three-year interval has not yet been reached. Inspections conducted in 2003 and 2004 found that few operators had clearly defined how the requalification process will be conducted: Will the exact same methods and evaluation instruments used for initial qualification be used for requalification? Will the instruments be modified to focus more, or less, on hands-on performance evaluation as opposed to knowledge evaluation for a task? What instruments will be used by the operator to verify knowledge, skills and abilities of individuals originally qualified using work performance history review? Have deficiencies in the qualification process found during the OQ inspection process been corrected for the requalification process?

It is the position of OPS that any evaluation(s) for qualification must verify that the individual performing a covered task has the knowledge, skills and abilities required to correctly perform that task. That does not require that evaluations for requalification must be performed exactly the same as was performed for initial qualification or previous requalifications. For example, if the operator had adequately performed the qualification process for initial qualification, those same evaluation instruments are appropriate for use in the requalification process. If an operator decides to change to using a valid performance-based evaluation process that includes knowledge verification as a component of the evaluation, as opposed to a written examination and hands-on observation used in the original qualification process, that is also appropriate. If an operator concludes that the task is knowledge-based, with no skill component required to be evaluated, the change to using only a written or oral examination as opposed to using a performance-based evaluation as was done originally is appropriate.

In conclusion, the qualification and requalification processes required in the current regulations and in PSIA 2002 must include the examination or testing of individuals, by

the method or a combination of methods described in the Act. As is the case presently, the process must demonstrate " . . .that an individual has been evaluated and can . . . [p]erform assigned covered tasks. . . and . . . [r]ecognize and react to abnormal operating conditions" as defined in 49 CFR 192.803/195.503. An evaluation remains the means to verify and demonstrate that an individual is qualified for covered task performance.