§192.616 Public Awareness

- Final Rule Published May 19, 2005
- Effective date of Final Rule June 20, 2005
- Requires operators to follow the guidance of API RP 1162, "Public Awareness Programs", First Edition, December 2003
  - Defines baseline and supplemental (enhanced) programs
- Modified in 2007 for operators of master meter systems and certain petroleum gas systems

Public Awareness Applicability

Applies to:

- Interstate and intrastate natural gas and hazardous liquid transmission pipelines
- Natural gas distribution companies
- Gathering pipeline operators

- **Defined in Section 2.8 of API RP 1162**
- **Audience includes:**
  - Affected public – residents along or near the pipeline
  - Emergency Officials
  - Local Public Officials
  - Excavators/Contractors
  - Land Developers
  - One-Call Centers

2003 Edition

Public Awareness Audience

Public Awareness Message

Major Requirements for communications

- Message type
  - Specific for each target audience
- Delivery frequency
  - Appropriate for audience
- Delivery methods or media
  - Delivered in an effective manner

Public Awareness Message

- Vendors have gone to a "common" pamphlet

- Generic messages may not convey all the required information.

Public Awareness Message

- The communications should include enough information so that in the event of a pipeline emergency, the intended audience will know how to:
    - identify a potential hazard
    - protect themselves
    - notify emergency response personnel and
    - notify the pipeline operator

Evaluating Program Effectiveness

API 1162 – Section 8 Program Evaluation

8.1 Primary purposes to:

- Assess if the current program is effective in achieving the objectives

- Provide information on implementing improvements based on the findings

Secondary purpose:

- Demonstrate the status and validity of program

8.2 Elements of Evaluation Plan

Measures should reflect:

- Whether the program is being implemented as planned (**the process**)

- Whether the program is effective (**program effectiveness**)

8.3 Measuring Program Implementation

Purpose, answer two questions:

- Has the Public Awareness Program been written to address the objectives, elements, and baseline schedule in Section 2?

- Has the public awareness program been implemented and documented according to the written program?

APPENDIX E

8.4 Measuring Program Effectiveness

Assess progress on measures to see if goals were achieved:

- Is information reaching the intended stakeholder audiences?

- Do the recipient audiences understand the messages delivered?

- Are the recipients motivated to respond appropriately in alignment with the information provided?

- Is the implementation of the public awareness plan impacting bottom line results (reducing incidents, third party hits, etc.) ?

8.4.1 Measure 1 Outreach

Percentage of Each Intended Audience Reached With Desired Messages

- Track percentage of individuals or entities reached within an intended audience (households, excavators, local government, first responders, etc.)

- How much of the targeted audience was actually reached? (Percentage)

- Measure will help to evaluate delivery methods

8.4.2 Measure 2

Understandability of the Content of the Message

- Looks at the percentage of the intended stakeholder audience that understood and retained the key information in the message received

- Evaluate the effectiveness of the delivery media style and content

- Will help to assess the effectiveness of the delivery methods used

8.4.2 Measure 2 Understandability of the Content of the Message

Pretest materials:

- Operators should pretest their public awareness materials for their appeal and messages for their clarity, understandability and retain-ability before they are widely used

- Pretest may be performed using a small representative audience or focus group (Sample surveys are in Appendix E)

8.4.2 Measure 2 Understandability of the Content of the Message

Survey target stakeholder audiences:

- Assess how much is understood by surveying the target stakeholder audience in face-to-face contacts, telephone or written surveys

8.4.2 Measure 2 Understandability of the Content of the Message

- Factors to consider when designing surveys include:
  - Appropriate sample size to draw general conclusions
  - Questions to gauge understandability of messages and knowledge of survey respondent
  - Retention of messages
  - Comparison of most effective means of delivery

8.4.3 Measure 3 Desired Behaviors by the Stakeholder Audience

- Measure of whether appropriate prevention behaviors have been learned and whether appropriate response or mitigation measures would or have taken place.

Baseline Evaluation:

- The survey conducted to assess Measure 2 (understandability of the content of the message) should be designed to include questions that ask respondents to report on actual behaviors following incidents

8.4.3 Measure 3 Desired Behaviors by the Stakeholder Audience

Supplemental evaluation:

- **Operators may also want to assess whether their public awareness program has successfully driven other behaviors**

8.4.3 Measure 3 Desired Behaviors by the Stakeholder Audience

- Whether excavators are following through on all safe excavation practices , in addition to calling the One Call Center

- The number of notifications received from the One Call Center (was there an increase after distribution of public awareness materials)

- An assessment of first responder behaviors, response to pipeline related calls and post incident assessments, were their actions consistent with the key messages in the public awareness communications

8.4.3 Measure 3 Desired Behaviors by the Stakeholder Audience

Supplemental evaluation:

- Assessments of actual incidents should recognize that each response would require unique on –scene planning and response to specifics of each emergency

- Measuring the appropriateness of public stakeholder responses could include tracking whether an actual incident that affected residents was correctly identified and whether reported and personal safety actions undertaken were consistent with public awareness communications

8.4.4 Measure 4 Achieving Bottom-Line Results

- The change in the number and consequences of third party incidents is one measure of bottom line results.

- As a baseline an operator should track the number of incidents and consequences caused by third party excavators

- The tracking of leaks caused by third party excavation should be compared to statistics of pipelines in the same sector

8.4.4 Measure 4 Achieving Bottom-Line Results

- Data regarding third party excavation damages should be evaluated over a relatively long period of time to determine any trends applicable to the operators public awareness program

- One other measure an operator may consider is the affected public's perception of the safety of pipelines

SUMMARY OF EVALUATION PROCESS

Evaluation Approaches	Evaluation Techniques	Recommended Frequency
Self Assessment of Implementation	Internal review	Annually
Evaluation of effectiveness of program implementation: Outreach Level of knowledge Changes in behavior Bottom-line results	Survey operator-designed and conducted survey	No more than four years apart.
Implement changes to the PAP	Responsible person as designated in written PAP	As required by findings within 12 months of evaluation

Evaluation Methods

- Operator designed and conducted survey

- Use of predesigned third party or industry association survey

- Trade association survey segmented by operator, state, or other relevant means to allow operator specific results.

Evaluation Methods

- Questionnaires distributed as an individual document or "bill stuffer."
- Personal or telephone interviews.
- Interview panels comprised of a broad sample of the general public (e.g., customers, local officials, excavators, persons living near pipelines).

Continuous Improvement Ideas

Tracking information

- Query data in meaningful way?
- One call tickets, particularly by caller type
- Excavators and one call tickets
- Number of hits declined?
- Calls to monitoring center

Continuous Improvement Ideas

Tracking information

- Repeat offenders for hits
- Repeat offenders for excavations without a valid one-call ticket
- Bad locate tickets
- Changes to mailing lists

Document,
Document, and
Document some more

Document

- **Follow up actions to data and analysis**
- Include other activities that exceed RP 1162 baseline activities such as
  - Planning meetings
  - Landowner contacts and meetings
  - Other interactions
    - Required by Emergency Planning, Damage Prevention, and Integrity Management

Document

- **Supplemental Activities or enhancements**
  - High Consequence areas
  - Population density
  - Land development activity
  - Pipeline history
  - Local conditions
- **Complete list of considerations in Section 6.2 of current RP1162**

API RP 1162 Revisions

- Focus on clarification and streamlining
- PHMSA concerned with no "watering down"
- Should versus May
- Documentation - i.e. regular mail versus certified for some stakeholders
- Frequencies – alignment between types of operators