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Public Awareness

CA State Fire Marshal Pipeline Safety Training

Wednesday, April 2nd
San Diego, CA

Presented by Kimbra Davis
Western Region Office of Pipeline Safety



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Overview

- Public Awareness History
- Review of the Rule Requirements
- Clearinghouse Results
- 2008 Inspection Plans and Expectations
- Inspection Plans Beyond 2008
- Helpful Resources



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PHMSA's Public Awareness History

Previous communications requirements existed:

- Damage Prevention Programs (§195.442)
- Emergency Plans for Fire, Police, & Public Officials (§195.402(c)(12))
- Public Education (§195.440)



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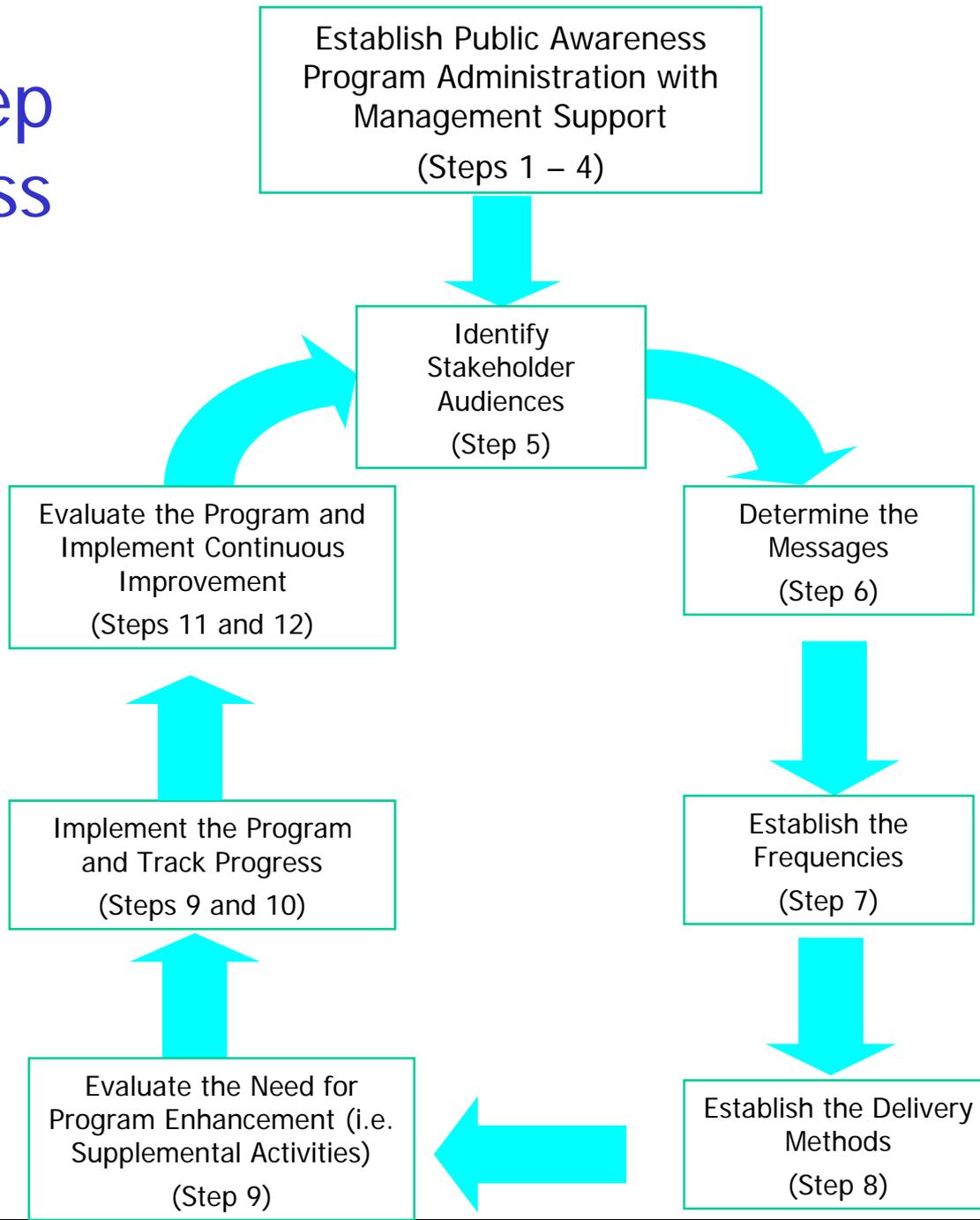
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Review of Public Awareness Rule

- Final Rule addressed the requirements of the Pipeline Safety Improvement Act (PSIA) of 2002
- Incorporated by reference the guidelines provided in the [American Petroleum Institute \(API\) Recommended Practice \(RP\) 1162](#), "Public Awareness Programs for Pipeline Operators."
- Effective June 20, 2005, and required compliance for most operators by June 20, 2006.

12 Step Process





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Specific §195.440 Requirements

- Develop and implement a written continuing public education program that follows RP 1162
- Must **assess the unique attributes** and characteristics of the operator's pipeline and facilities.
- Must follow the general program recommendations, including **baseline and supplemental requirements** or justify otherwise



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Program Administration

- Program objectives defined
- Statement of Management Commitment
- Description of Roles and Responsibilities
- Identification of Key Personnel
- Identification of Pipeline Assets
- Identification of unique attributes of the operator's pipeline and facilities



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Audience Selection

Four audiences identified by API RP 1162:

1. Affected Public (Landowners, Tenants, Residents living along the pipeline, places of congregation, and residents living near storage facilities.)
2. Emergency Officials
3. Public Officials
4. Excavators / Contractors



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Baseline Program Message

Written Program must

- Have a method to identify the stakeholder audiences
 - Define the message type and content
 - Establish a baseline delivery frequency
 - Identify media, methods of communication and selection basis
 - Requires program be conducted in English and other languages as necessary
-
- Creates a minimum level of Awareness among all Stakeholder Audiences



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Supplemental Enhancements

- When conditions along the pipeline suggest a more intensive effort is needed:
 - High Consequence Areas
 - Land Development Activity
 - Third-party Damage Incidents
 - Results from Public Awareness Program evaluations
- Complete list of considerations in Section 6.2 of RP 1162



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Measuring Effectiveness

Operators should assess the program on the following measures:

- Is the information is reaching the intended stakeholder audiences
- Does the audience understand the message(s)
- Are recipients motivated to respond in alignment with the information provided
- Is implementation of the Public Awareness Program is impacting bottom-line results (such as reduction in the number of incidents caused by third party damage)



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Clearinghouse Advisory Bulletin

- Published June 16, 2006 and requested submission of Written Programs by October 8, 2006
- 8 States decided to conduct independent Written Program reviews:
 - **CT, DC, IL, MD, MT, SD, VA, WY**
- Review Criteria for the Clearinghouse were developed jointly by National Association of Pipeline Safety Representatives (NAPSR) & PHMSA
- Central Clearinghouse conducted an **initial** review of Written Programs with feedback to the jurisdictional pipeline safety agency(ies)



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Clearinghouse Submittals

- Required information
 - OpID
 - System Types & Regions / States of Operation
 - Documents comprising the Written Public Awareness Program
- Submittal confirmation e-mails sent to operator and jurisdictional agency(ies)
- All submittal information stored in Public Awareness Program Database (PAPD)



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Which Operators Required to Submit?

- Gas Distribution (GD), except for Master Meter Operators and certain Propane Operators
- All Gas Transmission (GT) & Hazardous Liquids (HL) Operators
- All Gathering (Gath) Operators
- PHMSA tracked submissions against the set of operators who submitted CY 2005 Annual Reports



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Programs Submitted

- **1,568 Programs** covering **1,961 Operators**
- Vast majority of Programs covered systems jurisdictional to State Pipeline Safety Programs
- **1,082 Programs for GD** All systems in AK and some in CA & VA jurisdictional to OPS
- **568 Programs for GT / HL** 136 Programs covered systems jurisdictional to OPS
- **144 Programs for Gathering**



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Clearinghouse Review

- GD Program reviews began 10-2006
- GT/HL & Gath Program reviews began 1-2007
- Operators were sending Awareness Materials to stakeholders during the Clearinghouse review of the Written Programs
- Awareness Materials being sent to stakeholders were not reviewed by the Clearinghouse
- Clearinghouse closed 10-2007



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Review Criteria

- **RP 1162 Structure**
 - **Management Support & Personnel Roles**
 - **Implementation Audit**
 - **Effectiveness Evaluation**
- **Communication for all Audiences**
 - **Methods**
 - **Frequencies**
 - **Messages**
 - **Supplemental Elements**



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Results from the Clearinghouse

- Aspects of Written Program that differed from recommendations in RP 1162 recorded as a Deviation in the database
- Supplemental elements implemented recorded
- Jurisdictional agency(ies) e-mailed summary of Deviations and Supplementals implemented
- OPS CATS Managers working with Operators to resolve Deviations



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Deviation Statistics

	GD	GT/HL	Gath
# Questions	41	47	47
Avg # Deviations	15	20	24
Min # Deviations	1	1	1
Max # Deviations	41	47	47



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Gas Trans & Haz Liq Deviations

- Nuisance Deviations generated by Poorly Structured Questions on Pipeline Location Information
- Do baseline awareness materials to Affected Public, Emergency Officials & Local Public Officials include Pipeline location information (description of the purpose of pipeline markers and the information on them)?
- Pipeline location information recommended in Table 2-1 of API RP 1162 to be part of the **Written Program**
- “Description of the purpose of pipeline markers and the information on them” to be included in **Awareness Materials**



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Gas Trans & Haz Liq Deviations (cont)

- 70% Process & procedure to determine implementation of Supplemental Elements in High Consequence Areas (HCA)
- HCA supplemental enhancements, as described in RP 1162, meet the ASME B31.8S **external** communications requirements for GT Integrity Management Programs
- 36% of GT/HL Programs implement Supplemental Elements in response to HCAs



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Gas Trans & Haz Liq Deviations (cont)

- 54% Availability of list of pipeline operators through NPMS to Affected Public
- 37% Pipeline purpose and reliability to Affected Public
- 35% Awareness of hazards and prevention measures undertaken to Affected Public
- 38% How will messages be delivered to Emergency Officials



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Gas Trans & Haz Liq Deviations (cont)

- 34% Pipeline purpose and reliability to Excavators
- 34% One-call requirements to Local Public Officials
- 34% Member of all appropriate One Call Centers
- 33% Awareness of hazards and prevention measures undertaken to Excavators



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Gas Trans & Haz Liq Deviations (cont)

- 13% Frequency of messages to Emergency Officials & Local Public Officials
- 14% Frequency of messages to Affected Public
- 16% One-call requirements to Excavators
- 16% Leak recognition and response to Affected Public
- 16% Emergency Preparedness Communications to Emergency Officials



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All Programs Deviations

- 82% Process & procedure to determine implementation of Supplemental Elements in response to Third-Party Damage
- Significant Incidents Caused by Excavation Damage from 2002-2006
 - HL 14% Incidents, 63% Fatalities, 16% Injuries
 - GT 13% Incidents, 80% Fatalities, 23% Injuries
 - GD 37% Incidents, 28% Fatalities, 32% Injuries
- 17% implemented Supplemental Elements in response to Third-Party Damage



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All Programs Deviations

- 82% Process & procedure to determine implementation of Supplemental Elements in response to factors other than Third-Party Damage and HCAs
- 55% Effectiveness Evaluation every 4 years
- 51% Management Statement of Support
- 50% Annual audit of Program to ensure developed and implemented according to the guidelines in RP 1162



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Summary of Clearinghouse Results

- New aspects of public awareness resulted in the highest percentage of deviations
- All Programs – lack of detail around supplemental elements, effectiveness evaluation, implementation audit
- GD & GT/HL – messages to Affected Public



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OPS Inspection Philosophy

- Operators have transitioned **from planning to the execution** and implementation phase of their programs.
- Operators should expect that PHMSA will begin **inspecting for compliance** with respect to implementation of the programs.
- Inspections will initially **focus on implementation**, not effectiveness



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Short Term – Standard Inspections

- Focus on implementation not program adequacy
- Validated through standard inspections
- Limited question set reflecting a review of records and documentation



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Implementation of Completed Program

- There is no single “due date” for distributing awareness materials to stakeholders
- “Due date” calculated by a simple formula:
June 20, 2006 plus RP 1162 Frequency
- First evaluation of effectiveness due in June 2010



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Baseline Delivery Requirements

Stakeholder Audience	Baseline Message Frequency
Residents along ROW and places of Congregation	2 years
Emergency Officials	Annual
Public Officials	3 years
Excavators and Contractors	Annual
One Call Centers	As required of One Call Center



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Awareness Materials Review

Per 195.440 (d), The operator's program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on:

1. Use of a one-call notification system prior to excavation and other damage prevention activities;
2. Possible hazards associated with unintended releases from a hazardous liquids or carbon dioxide pipeline facility;
3. Physical indications of a possible release;
4. Steps to be taken for public safety in the event of a hazardous liquid or carbon dioxide pipeline release; and
5. Procedures to report such an event (to the operator).



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Longer Term – Inspection Integration

- Inspection integration is a risk based, data driven approach
- Inspection scope will vary for each operator
 - Operator's performance
 - Criticality of service
 - Level of risk posed to people and the environment
- Public Awareness audits may include a comprehensive review of the operator's program or be focused on implementation only



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Revising Messages

NPMS

www.npms.phmsa.dot.gov

- April 2007 changes to the National Pipeline Mapping System (NPMS)
 - Public access to maps within a zip code, including attributes such as operator name, product, and operator contact
 - Local Public Officials and Emergency Officials can get electronic data layer AND add this layer to their own GIS
- Operator messages about NPMS should be modified to reflect new capabilities



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Revising Messages

811

www.call811.com

- National “Call Before You Dig” number went live May 1, 2007
- Market research demonstrates homeowners often don’t make the call
- CGA DIRT report of CY 2004 and 2005 shows 31% of damages and near misses have a root cause of “No Notification to One-Call Center”
- 811 should have a prominent role in Public Awareness Programs.



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Revising Messages

Pipeline Emergencies On-Line

www.pipelineemergencies.com

- National Association of State Fire Marshals (NASFM) first responder training curriculum completed January 2005
- On-line version scheduled for release March 2008
 - Seven sessions
 - Designed for pipeline safety awareness and as promotional piece for full curriculum
- Operators encouraged to provide the on-line version link to Emergency Officials



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