

Public Awareness Programs for Pipeline Operators

API RECOMMENDED PRACTICE 1162
THIRD EDITION, AUGUST 2022

ERRATA 1, FEBRUARY 2023



American
Petroleum
Institute

Special Notes

API publications necessarily address problems of a general nature. With respect to particular circumstances, local, state, and federal laws and regulations should be reviewed. The use of API publications is voluntary. In some cases, third parties or authorities having jurisdiction may choose to incorporate API standards by reference and may mandate compliance.

Neither API nor any of API's employees, subcontractors, consultants, committees, or other assignees make any warranty or representation, either express or implied, with respect to the accuracy, completeness, or usefulness of the information contained herein, or assume any liability or responsibility for any use, or the results of such use, of any information or process disclosed in this publication. Neither API nor any of API's employees, subcontractors, consultants, or other assignees represent that use of this publication would not infringe upon privately owned rights.

API publications may be used by anyone desiring to do so. Every effort has been made by the Institute to ensure the accuracy and reliability of the data contained in them; however, the Institute makes no representation, warranty, or guarantee in connection with this publication and hereby expressly disclaims any liability or responsibility for loss or damage resulting from its use or for the violation of any authorities having jurisdiction with which this publication may conflict.

API publications are published to facilitate the broad availability of proven, sound engineering and operating practices. These publications are not intended to obviate the need for applying sound engineering judgment regarding when and where these publications should be utilized. The formulation and publication of API publications is not intended in any way to inhibit anyone from using any other practices.

Classified areas may vary depending on the location, conditions, equipment, and substances involved in any given situation. Users of this recommended practice should consult with the appropriate authorities having jurisdiction.

Any manufacturer marking equipment or materials in conformance with the marking requirements of an API standard is solely responsible for complying with all the applicable requirements of that standard. API does not represent, warrant, or guarantee that such products do in fact conform to the applicable API standard.

Users of this recommended practice should not rely exclusively on the information contained in this document. Sound business, scientific, engineering, and safety judgment should be used in employing the information contained herein.

All rights reserved. No part of this work may be reproduced, translated, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher. Contact the publisher, API Publishing Services, 200 Massachusetts Avenue, NW, Suite 1100, Washington, DC 20001.

Copyright © 2022 American Petroleum Institute

Foreword

Nothing contained in any API publication is to be construed as granting any right, by implication or otherwise, for the manufacture, sale, or use of any method, apparatus, or product covered by letters patent. Neither should anything contained in the publication be construed as insuring anyone against liability for infringement of letters patent.

The verbal forms used to express the provisions in this document are as follows.

Shall: As used in a standard, “shall” denotes a minimum requirement in order to conform to the standard.

Should: As used in a standard, “should” denotes a recommendation or that which is advised but not required in order to conform to the standard.

May: As used in a standard, “may” denotes a course of action permissible within the limits of a standard.

Can: As used in a standard, “can” denotes a statement of possibility or capability.

This document was produced under API standardization procedures that ensure appropriate notification and participation in the developmental process and is designated as an API standard. Questions concerning the interpretation of the content of this publication or comments and questions concerning the procedures under which this publication was developed should be directed in writing to the Director of Standards, American Petroleum Institute, 200 Massachusetts Avenue, NW, Suite 1100, Washington, DC 20001. Requests for permission to reproduce or translate all or any part of the material published herein should also be addressed to the director.

Generally, API standards are reviewed and revised, reaffirmed, or withdrawn at least every five years. A one-time extension of up to two years may be added to this review cycle. Status of the publication can be ascertained from the API Standards Department, telephone (202) 682-8000. A catalog of API publications and materials is published annually by API, 200 Massachusetts Avenue, NW, Suite 1100, Washington, DC 20001.

Suggested revisions are invited and should be submitted to the Standards Department, API, 200 Massachusetts Avenue, NW, Suite 1100, Washington, DC 20001, standards@api.org.

Contents

1	Scope.....	1
2	Normative References	1
3	Terms, Definitions, Acronyms, and Abbreviations	1
3.1	Terms and Definitions	1
3.2	Acronyms and Abbreviations	4
4	Program Establishment.....	4
4.1	Overview	4
4.2	Public Awareness Program Components	5
4.3	Program Objectives	6
4.4	Program Administration	6
4.5	Pipeline Systems.....	6
4.6	Identify Stakeholder Audiences	6
5	Messages	11
5.1	General	11
5.2	General Pipeline Awareness.....	12
5.3	Damage Prevention.....	14
5.4	Emergency Awareness and Response	17
5.5	Pipeline Location	18
6	Delivery Frequencies and Methods.....	20
6.1	General	20
6.2	Delivery Frequencies	20
6.3	Communication due to New Emergency Contact Information and Introduction of New Hazards	21
6.4	Delivery Methods	21
6.5	Collaborative Programs.....	25
7	Program Implementation and Supplements	26
7.1	General	26
7.2	Program Implementation.....	26
7.3	Program Supplements.....	26
8	Public Awareness Program Evaluation	27
8.1	General	27
8.2	Annual Implementation Review.....	28
8.3	Effectiveness Evaluation	28
8.4	Other Effectiveness Evaluation Activities	33
8.5	Collaborative Effectiveness Evaluations.....	33
9	Documentation	33
9.1	General	33
9.2	Documentation Records.....	34
9.3	Record Retention	35
	Annex A (informative) Resources	36
	Annex B (informative) Examples: Annual Implementation Reviews	38
	Annex C (informative) Data Collection	49
	Annex D (normative) Effectiveness Evaluation Questions	55
	Annex E (informative) Supplemental Questions	76
	Annex F (informative) Large Diameter Rural Gas Gathering Lines	96
	Bibliography	968

Figures

1	Plan–Do–Check–Act (PDCA) Cycle	vii
2	Public Awareness Programs	5

Tables

1	Baseline Coverage Areas	7
2	Stakeholder Audience—Affected Public	9
3	Affected Public Baseline Coverage Areas	9
4	Stakeholder Audience—Emergency Officials	10
5	Stakeholder Audience—Public Officials	10
6	Stakeholder Audience—Excavators	11
7	General Pipeline Awareness Message Topics	12
8	Damage Prevention Message Topics	15
9	Emergency Awareness and Response Message Topics	17
10	Pipeline Location Message Topics	19
11	Baseline Delivery Frequencies	20
B.1	Message Frequency	45
B.2	Communication Methods	45
B.3	Message Content	45
C.1	Confidence Levels	50
C.2	Example Audience Size Table	52
C.3	Example Survey Responses	53
D.1	Standardized Survey Questions: Affected Public	56
D.2	Standardized Survey Questions: Emergency Officials	61
D.3	Standardized Survey Questions: Excavators	66
D.4	Standardized Survey Questions: Public Officials	71
E.1	Supplemental Survey Questions: Affected Public	77
E.2	Supplemental Survey Questions: Emergency Officials	81
E.3	Supplemental Survey Questions: Excavators	86
E.4	Supplemental Survey Questions: Public Officials	91

Introduction

Pipeline operators' public awareness programs help raise awareness of pipelines and associated facilities that exist in or near communities and provide information to stakeholder groups to help keep communities safe.

This recommended practice provides guidance for operators of regulated transmission, distribution, gathering pipeline, and underground storage systems to develop and manage public awareness programs tailored to meet the needs of communities. This recommended practice is supplemented by a guidance website hosted by API that provides additional information for operators that supplements the guidance in this recommended practice.

This document is intended to help operators determine program objectives that are appropriate for their company's pipeline system and to create processes to identify their stakeholder audiences, determine whether and when supplemental efforts are needed to support ongoing baseline program activities, and evaluate the effectiveness of their programs and identify program changes or adjustments, as needed.

Plan–Do–Check–Act

This recommended practice is organized around a Plan–Do–Check–Act (PDCA) program implementation cycle.

At its core, the PDCA cycle is a four-step model for carrying out continuous assessment and improvement and can be applied to a public awareness program as well as to individual elements and processes within the program. The PDCA cycle is useful when starting a new public awareness program; when developing a new or improved design of a process, product, or service; or when refining a repetitive work process.

Figure 1 provides an overview of the PDCA cycle.

The components of the PDCA cycle are as follows.

Plan: This step entails establishing the objectives and processes necessary to deliver results in accordance with the organization's policies and the expected goals. By establishing output expectations, the completeness and accuracy of the process is also part of the targeted improvement.

Relevant sections within this recommended practice that focus on "Plan" include the following:

- Program Establishment (see Section 4);
- Messages (see Section 5).

Do: This step is the execution of the plan designed in the previous step.

Relevant sections within this recommended practice that focus on "Do" include the following:

- Delivery Frequencies and Methods (see Section 6);
- Program Implementation and Supplements (see Section 7).

Check: This step entails the review of the results compared with established objectives.

Compare those results to the expected goals to ascertain any differences, looking for deviation in implementation from the plan.

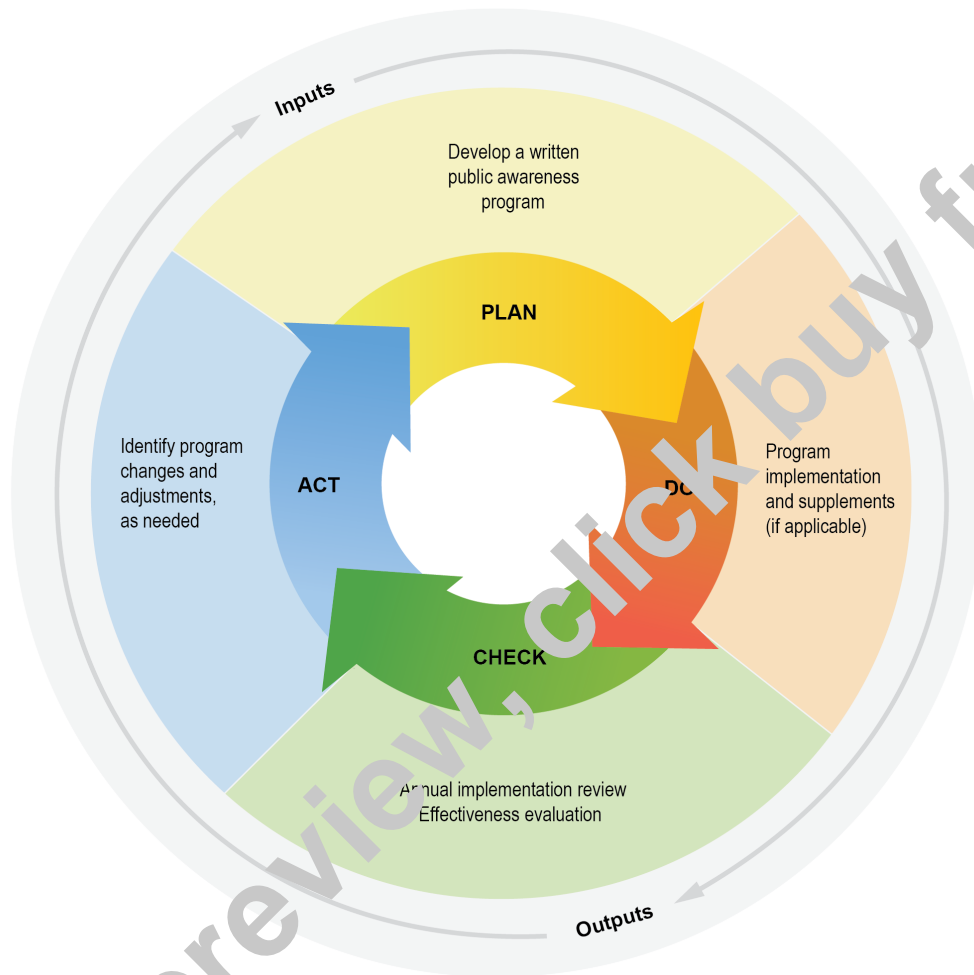
Relevant sections within this recommended practice that focus on "Check" include the following:

- Public Awareness Program Evaluation (see Section 8).

Act: This step is where a pipeline operator takes actions to improve process performance or determines where to apply changes that will include improvement of the process or program effectiveness.

Relevant sections within this recommended practice that focus on “Act” include the following:

- Any/all sections of an operator’s program where changes are made based on results of a prior annual implementation review or program effectiveness evaluation.



Key

Plan = strategic planning activity

Do = implementation activity

Check = evaluation and quality assurance/quality control activity

Act = program updates and adjustment activity

Figure 1—Plan–Do–Check–Act (PDCA) Cycle

Reflecting the cyclical nature of PDCA and the dynamic/evolutionary nature of the public awareness program, the entire process begins again from the start. Each cycle through PDCA produces opportunities for improvement. The application of PDCA logic to individual elements within the process can provide similar insights and opportunities for improvement within that element.

Currently in preview, click buy full version

Public Awareness Programs for Pipeline Operators

1 Scope

This document addresses the development, implementation, evaluation, and documentation of pipeline public awareness programs associated with distribution, regulated transmission, gathering pipeline, and underground storage systems in the United States that are required under federal or state pipeline safety regulations to have a public awareness program.

NOTE The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) Advisory Bulletin “Pipeline Safety: Clarification of Terms Relating to Pipeline Operational Status” (PHMSA-2016-0075) describes which regulated pipeline systems may be required to have a public awareness program.

A public awareness program is not required for abandoned pipeline systems. An operator can choose to use this recommended practice for nonregulated transmission, local distribution, and gathering pipeline systems.

Communications occurring prior to or during new pipeline construction are not covered by this recommended practice. Communications related to offshore operations and abnormal operations and during or related to emergencies are not covered by this recommended practice.

This recommended practice provides minimum requirements and offers guidance to operators to develop public awareness programs that take into account the differences and similarities in pipeline types, release characteristics, stakeholder audiences, operator activities, and other factors that can influence the program’s development and implementation.

This recommended practice provides operators with public awareness program elements and illustrates the process for establishing, implementing, measuring, and adjusting a program, in alignment with the Plan–Do–Check–Act (PDCA) process for managing programs. This recommended practice addresses certain operational changes requiring additional communication based on the introduction of new hazards.

NOTE At the time of this publication, certain nonregulated Class I and Class II rural gas gathering lines in the United States, as defined in 49 CFR Part 192, are not required by federal regulation to have a public awareness program. Annex F outlines the provisions of this recommended practice that may apply to operators following API 1182, *Construction, Operation, and Maintenance of Large Diameter Rural Gas Gathering Lines*.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

U.S. DOT Title 49¹, CFR Part 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*

U.S. DOT Title 49, CFR Part 195, *Transportation of Hazardous Liquids by Pipeline*

3 Terms, Definitions, Acronyms, and Abbreviations

3.1 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1

811

In the United States, a federally designated “Call Before You Dig” telephone number.

¹ U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, www.transportation.gov.