

Excavation Monitoring and Observation for Damage Prevention

TECHNICAL REPORT 1166
SECOND EDITION, OCTOBER 2015



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.

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.

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

API publications may be used by anyone desiring to do so. Every effort has been made by the Institute to assure 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.

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.

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, 1220 L Street, NW, Washington, DC 20005.

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.

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

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

Suggested revisions are invited and should be submitted to the Standards Department, API, 1220 L Street, NW, Washington, DC 20005, standards@api.org.

Currently in preview, click buy full version

Contents

	Page
1 Scope	1
2 Definitions	1
3 Flow Diagram	2
4 Decision Nodes	2
4.1 Decision Node 1—Is Additional Information Required?	2
4.2 Decision Node 2—Office Analysis and Resolution	3
4.3 Decision Node 3—Site Visit Resolution	3
4.4 Decision Nodes 4 and 5—Excavation Proximity to Pipeline	3
4.5 Decision Node 6—Ticket Closure	4
5 Tasks	4
5.1 Task A—Close Ticket	4
5.2 Task B—Secure Additional Information	5
5.3 Task C—Conduct Site Visit	5
5.4 Task D—Perform Locate	5
5.5 Task E—Excavation Monitoring	5
5.6 Task F—Excavation Observation Not Required	5
5.7 Task G—Excavation Observation	6
Figure 1 Flowchart—Excavation Monitoring and Observation	7
Bibliography	8

Currently in preview, click buy full version

Excavation Monitoring and Observation for Damage Prevention

1 Scope

The scope of this technical report is to provide a consistently applied decision making process for monitoring and observing of excavation and other activities on or near pipeline rights-of-way for “hazardous liquid” and “natural and other gas” transmission pipelines. The goal is to protect the public, excavation employees, and the environment by preventing damage to pipeline assets from excavation activities.

NOTE Pipeline operators are encouraged to refer to the latest edition of Common Ground Alliances “CGA Best Practices” for additional guidance.

2 Definitions

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

2.1

activity

Identified excavation [activity].

2.2

excavation

Disturbance or removal of dirt or subsurface debris from a specified area.

NOTE 1 Excavation can include the use of non-mechanized or mechanized equipment, or explosives.

NOTE 2 Specific definitions and requirements for excavation may be established by regulation and the user is encouraged to check with the applicable authorities (e.g. municipal, county, state, etc) as to any relevant details.

2.3

excavation monitoring

Oversight at regular intervals of the process to plan, request, design, approve, and excavate on or around pipelines to ensure the safe, effective completion with the desired results.

NOTE Excavation monitoring is commonly referred to or associated with Excavation Planning.

2.4

excavation observation

Active participation in the on-site excavation before, during and after activities cease to ensure proper completion of the agreed work in a safe, effective manner.

2.5

locate

To indicate the existence of a buried or otherwise obscured line or facility by establishing a mark through the use of stakes, paint, or some other customary manner that approximately determines the location of the line or facility.

2.6

one-call center

Entity in each state or territory that administers a system for their area of responsibility that can notify owners/operators of lines or facilities of proposed excavations.

NOTE 1 One-call provisions and laws vary by state and it is the operator's responsibility to be familiar with and comply with all applicable one-call laws.