

New ASTM Publication Compiles Trenchless Technology Standards

By John Jurgens

The American Society for Testing and Materials (ASTM) has recently announced the publication of *ASTM Standards Related to Trenchless Technology*. Glenn Boyce chaired the efforts of this publication, and he and his committee have collected 78 ASTM standards for this new reference manual. This document compiles standards pertaining to pipe materials and rehabilitation used in trenchless construction methods, including the latest standards on concrete pipe, vitrified clay, fiberglass pipe, steel pipe, ductile iron pipe, glass-reinforced concrete pipe, PVC pipe, polyethylene pipe, and rehabilitation.

Many times an ASTM standard is the backbone of an engineering document for a project. But reading and using the standard is not enough, because in many cases it specifies only the minimum requirements to do a job safely. It does not take into consideration additional performance standards that, while not absolutely critical to a job's completion, are necessary to fulfill customer expectations. Recognize that the standard as written is often a starting point; further augmentation of the standard in the final specification is usually important.

A project owner may have certain expectations about a project's completion—for example, the way landscaping should be restored to its original condition—that are not addressed in an ASTM document. If a specification calls for only meeting ASTM standards, any contractor who strictly follows the specification may not do a complete job.

Of course, it is not ASTM's responsibility to ensure that site conditions are returned to pristine condition or that contractors and owners are happy with each other after every project. ASTM's documents and services are intended to promote public health and safety; to contribute to the reliability of materials, products, systems, and services; and to facilitate commerce.

I am frequently asked questions about ASTM and how the society affects industry. Here is a brief overview of ASTM.

What Is ASTM?

Organized in 1898, ASTM has grown into one of the largest voluntary standards development systems in the world. ASTM is a not-for-profit organization that provides a forum for producers, users, ultimate consumers, and those having a general interest (representatives of government and academia) to meet on common ground and write standards for materials, products, systems, and services.

From the work of 132 standards-writing committees, ASTM publishes standard test methods, specifications, practices, guides, classifications, and terminology. ASTM's standards development activities encompass metals, paints, plastics, textiles, petroleum, construction, energy, the environment, consumer products, medical services and devices, computerized systems, electronics, and many other areas. More than 10,000 ASTM standards are published each year in the 72 volumes of the *Annual Book of ASTM*

Standards. These standards and related information are sold throughout the world.

What Is a Standard?

As used in ASTM, a standard is a document that has been developed and established within the consensus principles of the society and that meets the approval requirements of ASTM procedures and regulations.

Is Use of ASTM Standards Mandatory for Trenchless-Related Construction Projects?

ASTM standards are developed voluntarily and used voluntarily. They become legally binding only when a government body makes them so or when they are cited in a contract.

How Are ASTM Standards Developed?

Standards development work begins when a need is recognized. Task group members prepare a draft standard, which is reviewed by its parent subcommittee through a letter ballot. After the subcommittee approves the document, it is submitted to a main committee letter ballot. Once this is approved at the main committee level, the document is submitted for balloting to the society. All negative votes cast during the balloting process, which must include a written explanation of the voter's objections, must be fully considered before the document can be submitted to the next level in

the process. Final approval of a standard depends on concurrence by the ASTM Committee on Standards that proper procedures were followed and due process was achieved. Only then is the ASTM standard published.

What Types of Standards Does ASTM Produce?

ASTM develops six principal types of full consensus standards. They are:

- ❖ *Standard Test Method*—a definitive procedure for the identification, measurement, and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or service that produces a test result.
- ❖ *Standard Specification*—a precise statement of a set of requirements to be satisfied by a material, product, system, or service that also indicates the procedures for determining whether each of the requirements is satisfied.

- ❖ *Standard Practice*—a definitive procedure for performing one or more specific operations or functions that do not produce a test result.
- ❖ *Standard Terminology*—a document comprising terms, definitions, description of terms, explanation of symbols, abbreviations, or acronyms.
- ❖ *Standard Guide*—a series of options or instructions that do not recommend a specific course of action.
- ❖ *Standard Classification*—a systematic arrangement or division of materials, products, systems, or services into groups based on similar characteristics such as origin, composition, properties, or use.

Who Writes ASTM Standards?

ASTM standards are written by volunteer members who serve on technical committees. Through a formal balloting process, all members may have input into the standards

before they are published by ASTM.

Anyone who is qualified or knowledgeable in the area of a committee's scope is eligible to become a committee member. ASTM currently has 35,000 members representing virtually every segment of industry, government, and academia.

The new volume covering trenchless technology includes standards relating to specific products, general installation practices, and test procedures. For engineers, project owners, and contractors, as well as others involved with or interested in the trenchless construction industry, the \$75 price tag affixed to this publication is a worthwhile investment. For more information, see ASTM's Web site at www.astm.org. ♦

John Jurgens, Trenchless Resources International, is a leading advocate for the use and understanding of standards in trenchless construction.

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