

CRE SUBCOMMITTEE CHAIR'S
ORAL REPORT OUTLINE

SUBCOMMITTEE: Pressure Vessels and Tanks

DATE: Tuesday, October 12, 1999

MAJOR ISSUES THE SUBCOMMITTEE IS ADDRESSING:

PVRC Weld Spacing study complete &	
650-017 Weld spacing	Publication
653-082 Deterministic method	Working
650-477 Floating roofs (Appendix H)	Working
653-097 Inspection intervals	Working
653-063 Qualification of Floor Scanner Equipment	Publication

Task Groups

API 620 Stainless steel tanks
Frangible roofs
Companion item (Geodesic Dome Frangibility)
Seismic (API 650 and API 620)
External pressure

MAJOR CONCERNS OF SUBCOMMITTEE AND PROPOSED REMEDIES:

Seismic rules applied to industry per ICBO 2000.

ISO Standardization

Reduced staff, lack of continuity,

CHANGES IN REVISED STANDARDS THAT COULD HAVE SIGNIFICANT BUSINESS IMPACT ON USERS:

1. The CRE is looking for a brief description (1-2 paragraphs) of any forthcoming changes to standards that should be highlighted to company management because they may:
2. Incur a significant cost or savings to equipment cost or repair; Require a significant addition or allow for a reduction in engineering effort necessary to design or specify equipment procurement;
3. Noticeably improve equipment reliability or safety.

ICBO 2000 will become effective within a year or so. When it does then rules pertaining to seismic requirements for non building structures such as tank will be enforced by local permitting agencies and building code officials. The existing seismic provisions of both Api 620 and 650 will be completely out of date and unusable as the methodology used by

UPDATE ON ASTM GUIDE TO TANK BOTTOMS HYDRAULIC INTEGRITY

Gene Milunec – Mobil Oil

Background

An ASTM Task Group was formed in January 1997 to develop a guide for use in assuring the hydraulic integrity (leak tightness) of new, repaired, or reconstructed tank bottoms. The guide was to identify technologies and procedures as well as existing standards that could be used to provide an additional degree of confidence in the hydraulic integrity of newly constructed or modified tank bottoms. This guide is to be balloted to the ASTM E50 committee.

Current Status

The ASTM Task Group has prepared several drafts of a guide document, the latest being issued on 7/16/99. According to the Task Group Chairman, Henry Gorin of the Defense Energy Support Center, they have entered the stage of refining the draft and next will be considering steps for preparing the document for ballot.

API Interface

Two members of the API PV&T subcommittee, John Fumbanks and John Lieb, have been involved with the ASTM Task Group since its early activities. In January 1999, Alan Wolf and Gene Milunec of the API Leak Detection Work Group received copies of the ASTM draft guide and have since provided comments to the ASTM Task Group. Additionally, Roland Goodman, API Standards Associate, has been communicating with Chairman Henry Gorin.

Concerns

Members of the API Leak Detection Work Group have raised the following concerns with this ASTM document:

1. It is redundant with several API publications on AST leak detection technology and AST inspection practices
2. Some of the performance characteristics attributed to AST leak detection technologies are inaccurate
3. Inspection practices from API 650 and API 653 are misrepresented as leak tightness assurances, and,
4. The qualifications and requirements for some NDE practices exceed API 650 and 653 requirements.

The API Leak Detection Work Group has raised these concerns to the ASTM Task Group through written comments on the drafts. Also, in a September 1999 letter to Henry Gorin, Roland Goodman pointed out that the overlap of API publications and this ASTM publication may cause confusion among regulators and may lead to unnecessarily rigorous regulations for ASTs.

Recommendation

As a remedy to the concerns raised above, the API has suggested that the ASTM Task Group work with the API Subcommittees on Inspection and Pressure Vessels and Tanks in reviewing existing API publications and incorporate the concepts of the ASTM draft document into a revision of API RP 575, Inspection of Atmospheric and Low-Pressure Storage Tanks.