

K You Should **Know**



A Message from the American Concrete Pipe Association

Bulletin No. 137

OSHA Supports ACPA's Claim Regarding Trench Boxes

The Indiana-Kentucky-Ohio Concrete Pipe Association (IKOCPA) submitted to Occupational Safety and Health Administration (OSHA) the claim by the American Concrete Pipe Association (ACPA)¹ that there is an obvious conflict between the OSHA regulations and ASTM D 2321, *Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications* regarding the use of movable trench boxes.

OSHA's response confirms the conflict, and includes the following:

“ASTM D 2321 Sections 6.4.1 and 6.4.2 recommend not disturbing the backfill when using a movable trench box and/or shield. In some cases, some contractors have found that if the trench box is installed in accordance with 1926.652(g)(2) – that is, no more than 2 feet above the bedding material – a problem arises. With the trench box no more than 2 feet above the bedding, once the backfill is added the trench box walls wind up below the surface of the backfill. When the trench box is dragged to the next location, the backfill sloughs off into the space previously occupied by the trench box walls and the pipe losses (sic) the support provided by the backfill.”

“Consequently, some contractors want to install the trench box higher than 2 feet above the bedding in order to avoid disturbing the backfill. There seems to be a conflict between ASTM D 2321 and 1926.652(g)(2). Does such a conflict mean that this work practice is permissible under 1926.652(g)(2)? No, it is not permissible if workers are in the trench when the trench box is more than 2 feet above the bedding.”

“In accordance with Section 17 of the Occupational Safety and Health Act of 1970 (as amended through January 1, 2004), the maximum penalty that may be assessed for a single, non-criminal violation of this requirement is \$70,000.”

Of greater consequence is the increase in fatalities related to trenching, which is generally recognized as one of the most hazardous operations in the construction industry.

Due to the inherent strength of concrete pipe, it is much less dependent upon support from the backfill material. Concrete pipe can more readily be installed in accordance with OSHA regulations without being in conflict with the proper industry installation practices.

¹“OSHA To Get Tough On Trenching Regulation Enforcement”, You Should Know Bulletin No. 132, American Concrete Pipe Association, November 2004.