



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

FEB 17 2004

The Honorable Ellen Engleman Conners  
Chairman  
National Transportation Safety Board  
490 L'Enfant Plaza East, SW  
Washington, DC 20594

Dear Chairman Conners:

This letter is an update to the Research and Special Programs Administration's (RSPA) response to National Transportation Safety Board (NTSB) Safety Recommendation P-01-1, resulting from the investigation of the July 7, 1998, natural gas distribution accident in Loudoun County, Virginia. This pipeline damage prevention recommendation addresses maintenance of specified minimum separation distance between plastic gas service lines and underground electrical facilities. RSPA requests that this recommendation be classified as "CLOSED - Acceptable Action" based on the actions described herein.

RSPA determined that the Common Ground Alliance (CGA), which RSPA helped form and partially finances, is the appropriate organization to review this damage prevention recommendations and to develop solutions. RSPA entered into a cooperative agreement with the CGA to investigate damage prevention solutions, including development of recommendations for minimum separation distance to protect plastic gas service lines from damage resulting from proximity to other underground facilities. On September 26, 2003, the CGA Board of Directors approved a new Best Practice to address the issue of minimum separation of underground utilities, which specifies that a minimum 12 inch radial separation should be maintained between underground gas lines and other facilities. This Best Practice is included in CGA's Best Practices publication. We believe this action is fully responsive to NTSB Recommendation P-01-1.

If we can be of further assistance, please contact me or James Wiggins, Director of Policy and Program Support, at (202) 366-4831.

Sincerely yours,

A handwritten signature in black ink, appearing to read "S. Bonasso", written in a cursive style.

Samuel G. Bonasso  
Deputy Administrator

Enclosure

cc: Robert Chipkevich, NTSB  
Rod Dyck, NTSB

**Updated Responses to  
NTSB Safety Recommendation  
P-01-1**

**Damage Prevention**

**P-01-1**      **Require gas utility operators to maintain a specified minimum separation distance, sufficient to protect against both thermal and mechanical damage, between plastic gas service lines and underground electrical facilities whenever they install a new gas service line or perform maintenance on existing lines.**

**Status:**      01/06/98 - ~~NTSB Safety Recommendation~~  
10/30/98 - ~~RSPA initial response~~  
06/29/99 - ~~NTSB Rated "OPEN - Acceptable Response"~~  
04/18/01 - ~~NTSB confirmed rating~~  
04/24/00 - ~~RSPA update to NTSB~~  
07/13/01 - ~~RSPA update to NTSB~~

**Action:**      07/13/01 - RSPA letter refers issue to Common Ground Alliance (CGA)  
07/01/02 - RSPA signs Cooperative Agreement with CGA  
06/26/03 - RSPA 1<sup>st</sup> Modification to Cooperative Agreement with CGA  
09/11/03 - RSPA 2<sup>nd</sup> Modification to Cooperative Agreement with CGA  
09/26/03 - CGA approves Best Practice on underground separations

**Updated Response:**

RSPA determined that underground separation between gas and electric service lines should be addressed as part of its damage prevention "best practices" initiative. RSPA entered into a cooperative agreement with the Common Ground Alliance (CGA) to investigate damage prevention solutions, including development of recommendations for minimum separation distance to protect plastic gas service lines from damage resulting from proximity to other underground facilities (including electrical lines).

The CGA Best Practices Committee investigated the issue, including consideration of the electrical conductor radial separation requirements included in the new edition of the National Electric Safety Code (NESC), which is the safety standard used by electric power companies. A NESC study demonstrated that 12-inch separation is usually adequate. On September 26, 2003, the CGA Board of Directors approved a new Best Practice to address the issue of minimum separation of underground utilities:

When installing new direct buried supply facilities in a common trench, a minimum of 12 inch radial separation should be maintained between supply facilities such as steam lines, plastic gas lines, other fuel lines, and direct

buried electrical supply lines. If 12 inches separation cannot be feasibly attained at the time of installation, then mitigating measures should be taken to protect lines against damage that might result from proximity to other structures. Examples may include the use of insulators, casing, shields or spacers. If there is a conflict among any of the applicable regulations or standards regarding minimum separation, the most stringent should be applied.

This is included in CGA's Best Practices publication, which includes a broad range of Best Practices for underground facility damage prevention.

CGA has also implemented a "regional partnership program" to strengthen damage prevention initiatives among national, regional, state, and local damage prevention groups and to promote the use of damage prevention Best Practices. The partnership program has grown to more than 19 partners, including regional organizations in Colorado, Georgia, Minnesota, Missouri, Ohio, Tennessee, and Wisconsin.

RSPA's Office of Pipeline Safety (RSPA/OPS) has hired Community Assistance and Technical Support (CATS) inspectors in each of the five pipeline safety regional offices to work with CGA and one-call centers to improve implementation of damage prevention best practices. RSPA/OPS' CATS inspectors work with CGA to promote regional partnerships through industry presentations, conventions, e-mail lists, and one-call centers. RSPA/OPS participated in the first CGA regional partnership meeting in December 2003.

RSPA believes that the CGA promulgation of this new Best Practice on underground separations addresses the interactions of all types of utility lines that could exist in a common trench. We believe this action is adequate to address the NTSB recommendation.

**Action Requested:** RSPA requests that Safety Recommendation P-01-1 be reclassified as "CLOSED – Acceptable Response" based on the alternative action described above..