



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

April 10, 2008

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Ms. Christina M. Sames  
Vice President, Operations and Engineering  
American Gas Association  
400 North Capitol Street, NW  
Washington, DC 20001

Re: Use of External Corrosion Direct Assessment on Cased  
Pipelines for Completion of Baseline Assessments

Dear Ms. Sames:

Thank you for your correspondence dated March 6, 2008, concerning the use of External Corrosion Direct Assessment (ECDA) on cased pipelines. We agree on many points you made in your letter, and through this letter I am suggesting a path forward.

In particular, the Pipeline and Hazardous Materials Safety Administration (PHMSA) agrees that neither current regulations nor the NACE International industry consensus standard, NACE RP0502-2002, "*External Corrosion Direct Assessment Methodology*," explicitly requires the use of Guided Wave Ultrasonics (GWUT) for cased piping. We would also like to offer the following clarifications with respect to integrity assessments on cased pipelines that comply with the integrity management rules in Title 49, Part 192, Subpart O.

Operators are required to assess all pipe segments that can affect high consequence areas (HCAs), including cased piping [49 CFR 192.919(c) and 921(a)]. This rule requires operators to perform a risk assessment of the covered segments to prioritize segments for assessment (among other purposes), but does not allow a risk assessment to be used to not conduct an integrity assessment of all line pipe in a covered segment [49 CFR 192.919(c)].

Though casings make up a very small percentage of the total gas transmission system, we recognize that some cased piping segments cannot (practically) be assessed using in-line inspection (ILI) or pressure testing. Moreover, the NACE ECDA standard referenced in the Gas IMP regulation does not explicitly reference or identify any technology to assess carrier pipe inside a non-shortened casing. Other technology can be used if the operator demonstrates it can provide an equivalent understanding of the condition of the line pipe [49 CFR 192.921(a)(4)].

On considering the problems associated with casings, last month at the NACE Corrosion 2008 Conference in New Orleans I suggested a strategy to address these gaps. I announced PHMSA will organize and hold a workshop addressing the points in your letter and to exchange

information on cased crossings. We believe this workshop will provide a venue for relevant pipeline stakeholders to present possible new solutions, and to identify and craft a consensus path forward to resolve challenges cased crossing pose.

This workshop will occur this summer and all stakeholders—pipeline operators; trade associations; and our State partners—represented by the National Association of Pipeline Safety Representatives (NAPSR), will be invited to participate. PHMSA is now contacting relevant stakeholders, developing the agenda, and will issue a Federal Register Notice announcing the workshop. NAPSR's awareness and understanding of these issues is important to ensuring the workshop output and path forward can be efficiently executed.

After hearing much about GWUT in New Orleans last month, we think it is important to elaborate on our many efforts addressing mutual solutions for cased crossings. As you know, PHMSA, the pipeline industry and standards developing organizations (SDOs) are collaborating to improve the effectiveness and expand the application of GWUT on cased crossings. A comprehensive approach is underway through the Integrity Management (IM) regulation, collaborative research and development, technology demonstrations and consultation with subject matter experts to resolve identified challenges. These efforts will improve our confidence in inspecting cased crossings.

In response to "our" efforts, NACE International is currently discussing how to appropriately revise the industry consensus standard, NACE RP0502-2002. Please know that PHMSA will play an active role in collaborating with the committee to bring clarity on inspecting cased crossings and the integration of effective technology. PHMSA would then review and consider incorporating the revised edition into its regulatory program.

PHMSA and the pipeline industry have collaboratively invested in six projects on GWUT research since 2002. We have funded \$2.4M and the industry has co-funded another \$2.7M. GWUT service providers and pipeline operators have also spent a lot of money and effort in GWUT. In July 2006, PHMSA sponsored a collaborative demonstration focusing on how research efforts are advancing anomaly detection and characterization capabilities through GWUT. All parties have learned about the variables affecting GWUT performance when applied to cased crossings. This event helped refine the natural gas IM checklist for use of GWUT down from 39 points to 18 specific points. Through this effort we addressed issues pertaining to the application process on cased crossings, the technology hardware and the qualifications of service provider personnel.

Thank you for providing your views on these issues on behalf of your members. If you have any questions regarding this correspondence, please do not hesitate to contact Zach Barrett on my staff at (202) 366-4564.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Wiese", written over a horizontal line.

Jeff Wiese  
Associate Administrator for Pipeline Safety