

MANITOBA) **Order No. 35/11**
)
THE PUBLIC UTILITIES BOARD ACT) **March 17, 2011**

BEFORE: Graham Lane, C.A., Chairman
Len Evans, LLD, Member
Monica Girouard, C.G.A., Member

**APPLICATION BY CENTRA GAS MANITOBA INC. TO VARY CSA Z662-07
TO USE SEALED-REINFORCED THREADED FITTINGS
FOR BELOW-GRADE USE IN RISER EXTENSIONS**

EXECUTIVE SUMMARY

By this Order, the Public Utilities Board (Board) denies an application by Centra Gas Manitoba Inc. (Centra) for a variance of Canadian Standards Association's (CSA) Z662-03 (now superseded by CSA Z662-07), pertaining to the use of a sealed reinforced threaded connection in below-grade applications for service riser extensions.

APPLICATION

On June 21, 2006, Centra applied to the Board to vary Board Order 14/04 and allow the use of a Sealed Reinforced Threaded (SRT) connection for below-grade use in riser extensions as part of the Riser Rehabilitation Program.

Natural gas service lines extend from gas service mains, normally located with a street right-of-way, to a customer's building. Service risers are the portion of the gas service line that rises from the gas service line typically to a shut-off valve and meter set located at the outside of a building.

A service riser may require an extension if the shut-off valve is too close to the ground. Service riser rehabilitation may require a service line to be extended using a below-ground connection through welding a new service riser to an existing service line. To reduce service costs and challenges in finding qualified welders, Centra proposed the use of a SRT fitting.

Board Order 133/06 authorized the use of sealed reinforced connections for testing purposes, provided such tests were not at or near any occupied residential or commercial dwelling units. The same Order also requested Centra Gas file a test plan and the subsequent results of tests to verify the integrity of the proposed amendment.

Board Order 14/04 recognized CSA Standard Z662-03 as the minimum standard for design, installation, testing, operation and maintenance of gas pipelines in Manitoba.

Board Order 170/07 has superseded Board Order 14/04 and it established CSA Z662-07 as the minimum standard for the design, installation, testing, operation and maintenance of gas pipe lines in Manitoba.

CSA Z662-07 specifically states:

Threaded pipe-to-pipe and pipe-to-component connections shall not be used for:

- a) permanently buried installations, except for auxiliary joints (such as drains, valve body bleeds, and instrument taps) directly into components;
- b) pipe larger than 114.3 mm OD;
- c) pipe larger than 60.3 mm OD with a maximum operating pressure greater than 3500 kPa;
or
- d) piping in HVP service, except for joints in instrument piping.

Centra filed a number of plans and reports with the Board in support of SRT fillings, including:

- June 21, 2006 - Request for Variance of CSA Z662-03 (Clause 4.5.2) for a Sealed Reinforced Threaded Connection in Below Grade Applications for Service Riser Extensions;
- March 2007- Plan for Evaluation of SRT Coupling for Below Grade Use;
- January 2009 – Application for Approval: Below-Grade Installation of Sealed Reinforced Threaded (SRT) Fittings;
- October 2, 2009 - Centra Gas Manitoba Inc. (“Centra”) Request for Variance of CSA Z662-07 Clause 4.5.2 for a Sealed Reinforced Threaded Connection in Below Grade Applications for Service Riser Extensions. Addendum to: Application for Approval: Below-Grade Installation Sealed Reinforced Threaded (SRT) Fittings; and

- October 22, 2010 - Centra Gas Manitoba Inc. (“Centra”) Request for Variance of CSA Z662-07 Clause 4.5.2 for a Sealed Reinforced Threaded Connection in Below Grade Applications for Service Riser Extensions. Addendum 2 to: Application for Approval: Below-Grade Installation Sealed Reinforced Threaded (SRT) Fittings.

BOARD FINDINGS

The Board has reviewed the Application and supporting material supplied by Centra, and will deny the application from Centra to use proposed sealed-reinforced threaded joints for below-grade applications.

That said, the Board commends Centra for the research it conducted in support of its application, and for the Utility’s careful and comprehensive responses to numerous technical questions posed by the Board during the testing process.

The Board is of the opinion that CSA requirements prohibiting the use of threaded pipe-to-pipe joints are quite specific and, despite the technical studies supplied by Centra, there remain concerns with respect to threaded joint material compatibility under various environmental and soil conditions.

The Board notes that Centra’s application was primarily driven by the fact that Centra was experiencing challenges in finding qualified welders. Given that a number of years have passed since the original application, the Board is uncertain whether the previously indicated shortage of welders remains as relevant as it was in 2006.

In any case, given Centra’s proposal is in direct conflict with the CSA Standard recognized by the Board in Order 170/07, the Board recommends that if Centra wants to pursue its proposal further that it do so through the CSA Standards making body. It is the Board’s belief that what would represent a significant variance from a CSA Standard should best be dealt with by the CSA and its technical review process.

