



May 13, 2016

ATCO Pipelines  
7210 - 42 Street  
Edmonton, Alberta T6B 3H1

Attention: Mr. Graeme Feltham, P. Eng.

**ATCO Pipelines  
Radiographic Weld Inspections**

**Information request round 1**

Thank you for your letter of May 3, 2016, describing the deficiency identified by ATCO Pipelines respecting potentially substandard radiographic inspections of prefabricated welds produced in the ATCO welding shop between 2008 and 2015. The AUC requests the following information clarification. Your response by May 31, 2016 is requested.

Should you have any questions, please contact the undersigned at 403-592-4434 or by email at [brian.shand@auc.ab.ca](mailto:brian.shand@auc.ab.ca).

Yours truly,

Brian Shand, P. Eng.  
Director, Gas Facilities  
Facilities Division

Attachment

cc: Mr. Howard Wallace  
Alberta Energy Regulator

**ATCO Pipelines  
Radiographic Weld Inspections**

**Alberta Utilities Commission Information Request Round 1 to  
ATCO Pipelines**

**ATCO-AUC-2016MAY13-001**

**Reference: May 3, 2016 ATCO Pipelines letter**

**Issue: Historic operation**

**Request:**

- (a) Please describe the location and ownership of the welding shop, and the procedural or contractual oversight arrangement utilized by ATCO Pipelines for use of the welding shop.
- (b) Please describe in detail the process that was utilized by the ATCO welding shop and by ATCO Pipelines between 2008 and 2015, and the procedural, training, or other factors that contributed to potentially substandard radiographic inspections that may have resulted in unidentified weld defects.
- (c) Please describe in further detail the specific nature of the deficiencies identified respecting the substandard radiographic inspections.
- (d) Please discuss how the 2008 through 2015 time frame for substandard inspections was determined and whether ATCO Pipelines considers prefabricated pipeline assemblies prepared prior to this time period to be at a similar risk.
- (e) Please provide an assessment of the reasons why the procedures utilized from 2008 through 2015 were not effective.
- (f) Please discuss the reasons why the radiographic inspections were only recently identified as deficient, and why the problems were not identified immediately after the radiographic inspections were completed.
- (g) Please discuss the oversight of radiographic inspections of field-installed pipelines and whether ATCO Pipelines considers those installations to be subject to similar threats to those associated with piping prefabricated in the ATCO welding shop.
- (h) Please discuss if ATCO considers that the contractor(s) engaged by ATCO may have been utilized by other facility owners and any action ATCO has taken to advise those other operators of potential concerns.
- (i) Please discuss the legislative framework and standards that ATCO Pipelines considers to be relevant with respect to the radiographic inspection process and how ATCO Pipelines has complied with those requirements.
- (j) Please discuss whether ATCO Pipelines considers that the pipelines containing welds with potentially problematic radiographic inspections meet the requirements of CSA Z662.

**ATCO-AUC-2016MAY13-002**

**Reference:** May 3, 2016 ATCO Pipelines letter

**Issue:** Locations of installations

**Request:**

- (a) Please provide a list of site locations where the subject prefabricated assemblies were installed including the maximum operating pressure, any operating pressure deration implemented, facility class location and size of piping.
- (b) For the above list, please identify any sites where re-inspections have been completed, the results of the re-inspection and any repairs or replacements conducted.
- (c) For the above list, please identify which are below-ground installations and the nature of those installations.
- (d) For the above list, please describe the hydrostatic testing undertaken including the duration and percentage above the intended maximum operating pressure.

**ATCO-AUC-2016MAY13-003**

**Reference:** May 3, 2016 ATCO Pipelines letter

**Issue:** Revised operation

**Request:**

- (a) Please describe the revised procedures and controls that have been implemented to ensure that radiographic inspections of prefabricated piping assembled in the ATCO welding shop meet industry standards.
- (b) Please describe how ATCO will work to establish welding inspection procedures and ensure its contractors have demonstrated an ability to correctly interpret results.
- (c) Please describe how any pipeline operating pressure deration was determined, the intended duration of the deration and any associated ATCO system capacity and operational implications.

**ATCO-AUC-2016MAY13-004**

**Reference:** May 3, 2016 ATCO Pipelines letter

**Issue:** Timing

**Quote:** “ATCO Pipelines has prioritized the re-inspection of large diameter welds in populated areas and expects to complete any necessary repairs to those by the end of 2016. The remainder will be completed prior to the end of 2019.”

**Request:**

Please describe the reasons for the length of the period from 2017 through 2019 to complete the re-inspection, discuss the risks associated with that time period and comment on opportunities to expedite that process.

**ATCO-AUC-2016MAY13-005**

**Reference:** May 3, 2016 ATCO Pipelines letter

**Issue:** Other locations

**Quote:** “We estimate that approximately 90 per cent of the affected welds are located above ground and most are installed at ATCO facilities.”

**Request:**

Please discuss what other locations aside from ATCO facilities have utilized the affected piping and what action or notification has been established.