



AltaGas Utilities Inc.
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November 28, 2014

Brian Shand, P. Eng.
 Director, Gas Facilities
 Alberta Utilities Commission
 Fifth Avenue Place, Fourth Floor
 425 First Street S.W.
 Calgary, Alberta
 T2P 3L8

Dear Mr. Shand:

**Re: AltaGas Utilities Inc.
 Review of Pipeline Integrity Management and Emergency Procedures Manuals**

AltaGas Utilities Inc. (AUI) is in receipt of your letter dated September 29, 2014. AUI confirms all procedural manuals have been prepared and maintained in an up-to-date fashion in accordance with relevant industry and CSA standards. AUI further submits that the company is operating in day-to-day compliance in accordance with the procedures established in the relevant integrity management programs and emergency manuals.

With respect to the AUC's current areas of interest, AUI submits the following:

1. The five highest risk high pressure pipelines in the AUI system are currently considered to be:

Description	Location	Length	Size	Material	Vintage	License Numbers	Risk Factors
DR: Drumheller Town supply line	35-28-20-W4M to 27-28-20-W4M	3227m	114.3mm (4")	Steel	1955	613-2, -26	age, external coating deterioration, soil side corrosion, high number of customers served, single source of gas supply
WS: Village of Pickardville supply line	32-59-26-W4M to 36-58-27-W4M	11889m	114.3mm (4")	Steel	1954	210-38	age, external coating deterioration, soil side corrosion
LE: Town of Calmar supply line	31-49-26-W4M to 33-49-25-W4M	12324m	88.9mm (3"), 114.3mm (4")	Steel	1950	1055-4, -33, -34, -67, -86, -88, -89, -90, -103, -105	age, external coating deterioration, soil side corrosion, number of corrosion leaks
HA: Town of Hanna supply line	8-31-14-W4M to 4-32-15-W4M	17073m	88.9mm (3")	Steel	1953	1529-1, -3, -9, -13, -15, 18	age, external coating deterioration, soil side corrosion, leaks
ST: Town of Stettler supply line	36-38-20-W4M to 4-39-19-W4M	5282m	88.9mm (3"), 114.3mm (4")	Steel	1951-53	947-1, -2, -5, -6, -11, -25, -27, -29	age, population density near pipeline, high number of customers served

Several criteria considered in the assessment of relative risk associated with AUI's high pressure pipeline systems are described below. It should be noted that not all risks are necessarily identified with each of the five pipelines noted above.

- Age of pipe
- Pipe material – different risks associated with aluminum pipelines versus steel
- External coatings – bare steel pipelines and those protected by early technology external pipeline coatings from the 1950's to mid-1960's are more vulnerable to corrosion
- Cathodic protection requirements and corrosion – the state of cathodic protection and evidence of soil side corrosion of a pipeline are an indicator of probability of continued corrosion and potential of leaks or pipeline failure
- Leak rate – the occurrence of leaks on a pipeline over time is an indicator of relative risks associated with the pipeline operation
- Gas quality – pipelines with a history of intermittent producer or supplier liquids present a greater concern related to internal corrosion
- Population density – the presence of high pressure lines in densely populated areas represents an increased risk over those in sparsely populated areas
- Depth of cover – pipelines considered shallow or marginally meeting depth requirements have an increased risk of damage
- Customers served – pipelines that are single or significant sources of supply to densely populated areas will affect many residential, commercial or industrial customers in the event of a failure

AUI uses several methods of risk mitigation for high pressure pipelines, including, but not limited to:

- Annual leakage surveys, right-of-way visual inspections, and initial and annual depth of cover checks
- Ensuring presence of pipeline signage markers
- Annual cathodic protection surveys
- Monitoring against hazards posed by external interference
- Pipe replacement

2. AUI uses one of the following two systems at each interconnection between high pressure pipelines of different licensed maximum operating pressures for pressure control and overpressure protection:

- A regulator-relief system – a pressure regulator with a full-flow capacity relief valve immediately downstream, or
- A monitor regulation system – two pressure regulators in series, with one regulator taking over pressure regulation in case the other one fails in the open position.

In addition, AUI uses remote monitoring systems with alarms in place to notify personnel of deviations from normal operating pressures at these interconnections.

3. AUI performs visual inspections and depth checks during our annual leak surveys. Additional visual inspections are performed following high water times and severe weather events. There are no reported problem crossings at this time; pipeline integrity is intact at our river and water crossings. In the event a shallow pipeline location or a location subject to flooding damage is identified, plans for risk mitigation and safe operation consist of lowering the line to a safe depth or re-routing it as soon as practicable.

Visual inspection digs to assess the integrity of pipelines and external coating are planned by AUI only when the results of cathodic protection surveys indicate a pipeline direct assessment is necessary to determine low or deteriorating levels of cathodic protection, or upon discovery of external pipeline coating concerns, or when evidence is found of soil side corrosion on pipe exposed for other purposes (e.g. during construction or pipeline crossing witnessing). Currently there are no direct assessment exposures scheduled or planned at this time, but AUI will notify the Commission when the need for one is identified and make arrangements for Commission staff to be present when pipe is exposed.

Should you require further assistance please feel free to contact me at rwintersgill@agutl.com or 780-980-4985 at your convenience.

AltaGas Utilities Inc.

Per:



Russell Wintersgill
Vice President, Operations & Engineering