

# SMOKY LAKE COUNTY



Title: <b>Quality Management Plan for the Natural Gas Department</b>		Policy No.: <b>16-01</b>
Section: <b>09</b>	Code: <b>P-A</b>	Page No.: 1 of 5

Legislation Reference:	
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Purpose:	Smoky Lake County as the owner/operator of a Gas Distribution System in Alberta, we believe it is important to clearly understand and uphold the inherent responsibilities to design, construct, operate and maintain the Natural Gas Utility to ensure the safety of our customers, employees, and the general public.
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## Policy Statement and Guidelines:

### 1. OBJECTIVES:

- 1.1 This Quality Management Plan is intended to cover the design, construction and operation of a rural gas utility.
- 1.2 The Smoky Lake County (hereinafter referred to as "the County"), owns and operates a rural gas distribution system in Alberta and, in accordance with provisions of the *Municipal Government Act* and the franchise issued under the *Gas Distribution Act*, it has assumed the responsibility to provide natural gas service to residents in a specific area of the province.
- 1.3 The Reeve and Council, with the support of the municipal administration and staff, take full responsibility for ensuring that its distribution system is designed, constructed, operated and maintained in a manner that will ensure the safety of its customers, employees, and the general public.

### 2. GUIDELINES:

#### QUALITY MANAGEMENT PLAN FUNCTIONS

#### 2.1 Standards:

The County will design, construct, operate, and maintain its rural gas distribution system in accordance with the following standards:

- The Gas Distribution Act.
- The Pipeline Act and Regulations.
- The Municipal Government Act.
- The Water Gas and Electric Companies Act (as applicable).
- All Occupation Health and Safety Act, code and regulations (as applicable).
- Canadian Standards Association (CSA) Z662 Oil and Gas Pipeline Standard.
- Canadian Standards Association (CAN/CSA) Z731 Emergency Planning for Industry.
- The Technical Standards and Specifications Manual for the Rural Gas Program, issued by Rural Utilities Branch in the Department of Agriculture and Rural Development (ARD).
- Guidelines for Operations and Maintenance Practices in Alberta Natural Gas Utilities issued by the Federation of Alberta Gas Co-ops Ltd. and co-sponsored by ARD.

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**2.2 Design:**

The County will ensure that its distribution system is designed to safely deliver the required volumes of gas to each consumer under the most extreme conditions by:

- 2.2.1 Acquiring the services of a qualified gas distribution design specialist to determine system requirements.
- 2.2.2 Working with the design specialist to establish minimum end line pressure, appropriate route selection, and design and material requirements.
- 2.2.3 Acquiring pipe that has been inspected under the Quality Assurance Program and approved by the Rural Utilities Branch.

**2.3 Construction Testing and Commissioning:**

In order to ensure that all pipelines are constructed, tested and commissioned in the appropriate manner, the County will:

- 2.3.1 Have a documentation process in place that systematically identifies and tracks all the specific approvals, agreements, utility rights-of-ways, permissions and consents required and the dates each are acquired.
- 2.3.2 Ensure that all pipelines are buried to the depths specified in the applicable codes, regulations and standards by:
  - 2.3.2.1 Providing the contractor with the depth specifications and documenting the information and time of presentation.
    - Spot checking pipelines depths during and/or after the time of installation and documenting the findings.
- 2.3.3 Establish a system for recording and auditing the location, and material information for all pipe installed.
- 2.3.4 Ensure that all pipelines are tested to the pressures and times specified in the applicable codes, regulations and standards.
  - 2.3.4.1 Spot checking charts/pressure data (i.e., start time / location information) during testing and document these checks.
  - 2.3.4.2 Record all the test, location, and material data on a test confirmation report.
  - 2.3.4.3 Purging each pipeline using an approved method, prior to putting the line into service, and documenting the findings.

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<p>2.3.5</p> <p>2.3.5.1</p> <p>2.3.5.2</p> <p>2.3.6</p> <p>2.4</p>	<p>Ensure proper regulator and relief valve configuration and capacities are in place to adequately protect the distribution system and customer installations from excessive pressures by:</p> <p>Providing the technical information required to determine the proper capacities and configuration of the equipment to a qualified installer.</p> <p>Developing a specific audit procedure to ensure the correctness of the regulator and relief valve installation.</p> <p>Ensure pipelines warning signs are properly installed by inspecting all new crossings and above ground facilities, after completion, to confirm the placement of signs, and document accordingly.</p> <p><b><u>Operation, Maintenance and Repair:</u></b></p> <p>In order to ensure that the distribution system is properly operated, maintained, and repaired, the County will:</p> <p>2.4.1 Employ or contract the services of qualified field staff to safely operate and maintain the system. The level of manpower requirements will be established by developing a plan or formula, based on historical performance, system requirements and the level of service committed to by the distributor to complete these functions in accordance with industry standards.</p> <p>2.4.2 Ensure that the level of safety equipment for both the shop and emergency response vehicles (as adopted in the Operation and Maintenance Manual), is provided, inventoried, maintained, and calibrated as required.</p> <p>2.4.3 Monitor the levels of gas loss by:</p> <p>2.4.3.1 Recording and comparing wholesale tap purchases on a weekly basis.</p> <p>2.4.3.2 Comparing the wholesale purchases to the retail sales on a monthly basis.</p> <p>2.4.3.3 Physically checking the system for leaks by performing line walks on the distribution pipelines as per industry standards.</p> <p>2.4.4 Ensure that the proper levels of odorant are maintained in the system by:</p> <p>2.4.4.1 Checking the odorant levels at predetermined locations on each tap each month and recording findings.</p> <p>2.4.4.2 Testing or monitoring for levels of detectable odorant on a regular basis, with samples being taken not less than once a month at each test location.</p> <p>2.4.4.3 Maintaining records of monthly readings taken by contracted qualified parties, and spot checking and documenting those results at reasonable intervals.</p>

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2.4.5	<p>Ensure all underground damage and leaks are diligently repaired and reported to the appropriate regulatory body:</p> <p style="margin-left: 40px;">2.4.5.1 Damage or leaks to high pressure (&gt; 700 kPa) pipelines or facilities must be reported to the Alberta Energy Regulator (AER) and a copy sent to Rural Utilities Branch (ARD).</p> <p style="margin-left: 40px;">2.4.5.2 Damage or leaks to low pressure (&lt;700 kPa) pipelines or facilities must be reported to Rural Utilities Branch (ARD).</p>
2.4.6	<p>Develop and maintain a regular preventative maintenance program (i.e. line walks, cathodic protection surveys, reg. station operation and painting of above ground facilities) to safeguard the distribution system against premature deterioration. The frequency of these activities must be scheduled as established in the County's Operations and Maintenance program.</p>
2.4.7	<p>Establish a maintenance/control system of equipment used to located pipelines, measure concentrations of odorant and gas, levels of cathodic protection, pressure gauges, etc.</p>
2.5	<p><b><u>Emergency Response:</u></b> To ensure that employees understand how to respond appropriately to emergency situations, the utility will:</p>
2.5.1	<p>Develop a safety program and document the frequency and results of each employee's involvement. This program should cover the following situations:</p> <ul style="list-style-type: none"> <li>■ Gas odor calls.</li> <li>■ Carbon monoxide poisoning.</li> <li>■ Explosions and fires.</li> <li>■ Major system outages.</li> <li>■ Major ruptures on low pressure and high pressure pipelines.</li> </ul>
2.5.2	<p>Ensure that employee orientation session include the above safety program.</p>
2.5.3	<p>Actively participate in community and internal mock emergency response exercises, involving the above situations, and review the results of the exercise.</p>

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2.6	<p><b><u>Surveying and Plant Records:</u></b> In order to ensure the completeness, accuracy and timely completion of the County's as-built drawings and ensure that the Alberta One Call data base is current, the County will:</p> <p>2.6.1 Monitor the progress of as-built surveys and mapping to ensure that the license/as-built application is submitted to ARD by March 31 of the year following construction.</p> <p>2.6.2 Review the as-built drawings and license submission against each year's new customer location listing for completeness.</p> <p>2.6.3 Complete, check and return Alberta One-Call updates forms from information contained on the as-built drawing updates or construction application drawings.</p> <p><b>3. PROCEDURES:</b></p> <p><b><u>Responsibility:</u></b></p> <p>3.1 This Quality Management Plan highlights the safety related components of the Smoky Lake County Gas Utility's design, construction, operation, and maintenance programs. The County Reeve, Council and Administration hereby accepts the responsibility for compliance with this plan.</p> <p>3.2 The Smoky Lake County Natural Gas Department Manager will ensure implementation of the Quality Management Plan and monitor to incorporate industry requirements and bring updates for amendment to County Council for consideration from time to time.</p>

	Date	Resolution Number
Approved	<b>March 26, 2015</b>	# <b>484-15</b> - Page # <b>11712</b>
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