COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

B.T.U. GAS COMPANY, INC. CASE NO. 2007-00408

Alleged violations of administrative regulation
807 KAR 5:006, 807 KAR 5:022,
807KAR 5:027 and 49 CFR 191-192

CERTIFICATE OF SERVICE

I hereby certify the original and six copies of the testimony of Pam Williams has been served by hand delivery, this the 9th day of February, 2010 upon the following:

Jeff Derouen
Executive Director
P.O. Box 615
Frankfort, KY 40602-0615

KAREN CHRISMAN
McBrayer, McGinnis, Leslie & Kirkland
Whitaker Bank Building, Suite 300
P.O. Box 1100
Frankfort, Kentucky 40602-1100
(502) 223-1200
Fax 502 227-7385

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

B.T.U. GAS COMPANY, INC. CASE NO. 2007-00403

Alleged violations of administrative regulation
807 KAR 5:006, 807 KAR 5:022,
807KAR 5:027 and 49 CFR 191-192

PAM WILLIAMS
TESTIMONY PRESENTED ON BEHALF OF
BTU GAS COMPANY, INC

Paragraph One

I will address the violations alleged in the Commission's order of December 1, 2009 in the order that they appear. Paragraph One alleges BTU's Public Awareness Program does not follow the recommendations of API 4PP 1162 and does not access the unique attributes and characteristics of the operator's pipeline and facilities. Since the date of the investigation BTU Gas has revised the Public Awareness Plan and the new plan is attached to my testimony as Exhibit One. BTU has also filed with the public service commission the response to the first data request of commission staff and the additional response to first data request. In the first data request response is included Exhibit number two that is the mailer that was mailed to each customer of BTU along with their bill in the summer of 2008. In July of 2008 the classified ad that was included in the additional response was mailed to each BTU customer. These actions were taken before the Public Awareness Plan was revised. Since the Public Awareness Plan has been revised BTU will be following the revised plan taking the appropriate action as required by the new plan. I believe the new Plan to be in compliance.

Paragraph Two

Paragraph Two of the order of December 1, 2009 states BTU's Operator Qualification Plan does not include a list of covered tasks, a list of individuals and tasks they are to perform, or the intervals at which evaluation of the individual's qualifications is needed. BTU's Operator Qualification Plan is attached as Exhibit Two. It was revised after the deficiency noted in Paragraph Two of the order of December 1, 2009. I believe the new Plan to be in compliance with Section 192.805. The individuals employed at BTU are currently qualifying to perform the covered tasks and will be qualified on or before April 9, 2010 as noted on page 3 of the manual.

Paragraph Three

Paragraph Three of the order states BTU's Operation and Maintenance Manual did not address procedures for taking precautions in situations of unsafe accumulations of gas. BTU submitted a manual that was drafted and believed to represent the operating conditions of BTU on November 3, 2008. However the manual did not reflect the information stated in the revised manual. The manual has been revised and this item is addressed under employee protection on page 19 of the new manual. The procedures outlined in the revised manual have always been the working protocol at BTU. I believe the new manual to be in compliance with Section 192.605.

Paragraph four

BTU has provided the Public Service Commission the manual and the model number of the equipment used for leak surveys and for the odorant samplings in the third response to informal conference memorandum. If this equipment is insufficient BTU will make arrangements to have the equipment evaluated by an outside contractor and independently contract for the odorization of the gas to be tested.

Paragraph five

Paragraph five alleges BTU has not patrolled mains where anticipated movement could cause failure or leakage and has not documented these lines or the intervals that they must be patrolled.

BTU has four such conditions in the BTU system. These conditions are patrolled each month when the gathering system of BTU is patrolled. However the conditions were not specifically noted in the records as being river crossing. Since the deficiencies noted in the order on December 1, 2009 the document attached as Exhibit three has been added to the patrolling records. Since the deficiencies noted in the order the operation and maintenance program of BTU has been revised and the Leakage Survey section on page 14 and the Investigation of Failures

section on page 11 addresses this deficiency. BTU is patrolling the mains and lines according to the Operations and Maintenance Program adopted by BTU.

Paragraph six

BTU conducted leak surveys according to the requirements set forth in paragraph six.

Paragraph seven

BTU conducted leak surveys according to the requirements set forth in paragraph seven.

Paragraph eight

Paragraph eight alleges BTU did not have critical or system safety valves listed in their records and did not identify specifically when each valve was checked and serviced. BTU has seventeen such conditions in its system. These values are checked at least once per year and each time there is weather below 25 degrees Fahrenheit. The document attached as Exhibit four has been added to the document as part of the patrolling records of the BTU Gas Company.

Paragraph nine

Paragraph nine alleges BTU did not have regulators and relief devices listed in their records to identify that each had been inspected each year. BTU has three such conditions in the BTU system. Since the deficiency listed in paragraph nine BTU has developed the document at Exhibit five. The relief valves and regulators are inspected when the gathering system is patrolled and the inspection document is to filed with the patrolling of the gathering system document.

Paragraph ten

Paragraph ten alleges that BTU is not inspecting their system for atmospheric corrosion on their above-ground piping. BTU does this inspection when the patrolling of the gathering system is done each month. Since the deficiency BTU has developed the document at Exhibit 5 entitled corrosion. BTU has three such conditions and the conditions are noted on this document and are inspected when the gathering system is inspected.

Paragraph eleven

Paragraph eleven alleges BTU does not have records to show their Operation and Maintenance procedures were being implemented. The records attached as Exhibits one through five are the records BTU has implemented to put in effect the revised manuals adopted by BTU.

Paragraph twelve

BTU is currently making application and will be completed by February 12th, 2010.

Paragraph thirteen

The Annual report is being completed by BTU's accountant.

Paragraph fourteen

BTU is drafting a written anti-drug policy.

Paragraph fifteen

BTU is drafting a written alcohol misuse plan.

Paragraph sixteen

Paragraph sixteen alleges house #238 has above-ground plastic water pipe with house clamps in use for their gas line. This customer was sent a letter on September 2, 2009 concerning this condition and this condition was repaired on September 11, 2009.

Paragraph seventeen

BTU will be unable to submit this documentation until the qualification has been completed according to the Phase Two work as set forth in

98 BTU's response to each allegation in utility inspection report no. 3.

99 According to the manual this work is scheduled to be completed April 9.

100 2010.

Pam Williams

PAM WILLIAMS

STATE OF KENTUCKY

COUNTY OF MAGOFFIN

This testimony was produced to me and duly subscribed, sworn and acknowledged to before me by Pam Williams, as the president of BTU Gas, to be her true act and deed as president of the corporation on this the 9th day of February, 2010.

My Commission expires: 9/15/2012

Joyce Cantrell

NOTARY PUBLIC
STATE AT LARGE

Public Awareness Plan

BTU Gas Company, Inc.

BTU Gas Company
P.O. Box 707
Salyersville, KY 41465

OBJECTIVES

1. **Educate our customers how to recognize the odor of natural gas and how to respond if they detect possible gas odors.**

2. **To raise the awareness of the affected public and key stakeholders of buried natural gas pipelines in the communities we serve.**

3. **To help excavators understand the steps that they can take to prevent third party damage and respond properly if they cause damage to our pipelines.**

4. **To help emergency response agencies that may assist BTU Gas Company, Inc. in an emergency understand the proper actions to take in response to a gas release or emergency.**

5. **To educate the public on the symptoms of carbon monoxide poisoning and the appropriate treatment should CO poisoning be suspected.**

6. **To educate the public about the protection of gas meters from damage by falling snow or other objects.**

Table of Contents

Public Awareness Policy

Our goal is to provide safe, reliable gas service to our customers and ensure the safety of those living and /or working near our gas pipelines. Public awareness is a critical component of our overall safety program. Every employee of BTU Gas Company, Inc. is committed to fulfilling our public awareness as described in this Public Awareness Program. Richard and Pam Williams are committed to providing the funding and management support to obtain an affective Public Awareness Program for the community served by BTU Gas Company, Inc..

1. Program Administration

BTU Gas Company, Inc.'s President, Pam Williams, is responsible for the overall conduct of this Public Awareness program. The Program Administrator is responsible to ensure that:

- Target audiences are identified
- Message(s) appropriate to each audience are identified
- Appropriate media are selected to transmit each message to each audience
- Appropriate message delivery frequencies are identified for each message and audience
- Messages are delivered as specified in the plan
- The effectiveness of the program is periodically evaluated
- The plan is modified to reflect the findings of the evaluation

The Program Administrator is responsible to periodically review the performance of the Public Awareness Program and the individuals responsible for its implementation. Funding and resource allocation requests for the Plan will be established at the level necessary to implement the Plan.

2. Affected Facilities

All of BTU Gas Company, Inc.'s gas pipeline facilities are included in this Public Awareness Program.

3. Stakeholder Audiences

The following stakeholder audiences have been identified:

1. Affected public in area where we operate
    A. Our customers
    B. Individuals living/working near our pipelines
2. Emergency officials in areas where we operate

A. Fire Departments
B. Police/Sheriff Departments

3. Public officials in areas where we operate
   A. Mayor(s)
   B. City and County Managers
   C. Planning Boards
   D. Zoning Boards
   E. Licensing Departments
   F. Permitting Departments
   G. Building Code Enforcement Departments
4. Excavators in area where we operate
   A. Construction companies
   B. Excavation equipment rental companies
   C. Public works officials
   D. Public street, road and highway departments (maintenance and construction)
   E. Timber companies
   F. Fence building companies
   G. Drain tiling companies
   H. Landscapers
   I. Well Drillers
   J. Home builders
   K. Land developers
   L. One-call centers

The Program Administrator is responsible to develop and maintain a list of each of these stakeholder audiences (possible except for 1(b) individuals living near BTU Gas Company, Inc.'s pipelines.)

- The list of our customers will be generated and maintained by Pam Williams

- The list of government and emergency response officials serving the area served by BTU Gas Company, Inc. will be maintained by Pam Williams Secretary.

- The names, addresses and telephone numbers of excavators will be obtained through a review of the "Yellow Pages" for each type of excavator listed above. Public Works and street, road and highway departments will be identified, maintained and updated by Pam Williams.

- The list of individuals living or working near our pipeline will be developed by matching nine-digit zip code numbers to areas served by BTU Gas Company, Inc. Addresses, but not names of individuals, within these zip codes will be listed. Addresses may also be obtained from

property owners list from the government records and/or by a list of water customers.

- If media other than direct mail will be used to reach non-customer individuals living or working near pipelines (e.g. newspaper, radio or television), then a list of addresses does not need to be maintained.

4. Message Type, Content and Frequency

The message type, content and frequency for each stakeholder audience are listed in Appendix A.

5. Development of Program Materials

The Program Administrator is responsible for ensuring that appropriate materials are developed and/or acquired for each communications activity listed. Materials should be pre-tested for clarity, understandability and retain-ability before they are widely used. The pretest should be performed using a small representative audience, for example, a small sample group of BTU Gas Company, Inc.'s employees and/or families that are not involved in developing the public awareness program, a small sample section of the intended stakeholder audience or others. Currently the suggested media to be used for contact would be bill stuffers and direct mail (contact), email notices and updates (where email addresses are available), targeted local TV and radio ads and/or educational CD ROMs.

The Public Awareness Program will be conducted in English and in other languages commonly understood by a significant number of and concentration of the non-English speaking population in our service area. To determine the languages that should be considered the Program Administrator may contact local election boards to determine in what languages voting ballots are required to be provided in the communities we serve.

6. Program Implementation

The Program Administrator is responsible to ensure that each target audience identified above receives the appropriate materials via the specified media (e.g. mass mailings, emergency official meetings) at the frequency specified in Appendix A. The Program Administrator should prepare an annual estimate of the resources required to implement the Program and request that the appropriate budget and human resources are available.

7. Management of Input/Feedback/Comments Received

It is anticipated that the implementation of this public awareness program will generate request for further information from those in the stakeholder audiences contacted. All inquiries should be directed to the Program Administrator.

Inquiries about the location of pipelines should be directed to Kentucky 811 or BTU Gas Company, Inc. at 606-884-2000.

8. Measuring The Effectiveness Of This Program

The Program Administrator is responsible to annually review whether the program has been developed and implemented according to the guide lines in RP 1162: Also, not to exceed four years, the effectiveness of the program will be reviewed to measure:

- Whether the information is reaching the intended stakeholder audience;
- If the recipient audiences are understanding the message delivered;
- If the implementation of the public awareness program is impacting bottom line results (such as reduction in the number of incidents caused by third-party damage).

This will include, at minimum:

- Tracking the number of calls received in response to materials,
- Reviewing the incidence of 3rd party damage to BTU Gas Company, Inc.'s facilities,
- Reviews the following group meetings,
- Contacting a random sample of each stakeholder audience, confirming their receipt of the materials and assessing their understanding of the target message(s) (through direct mail and/or telephone surveys).

If the results of the evaluation show that one or more target audience is not effectively receiving the target message the Program Administer should review the message type, content and delivery method to determine if more effective means of communications are available.

Consideration will be given to supplemental program enhancement where:

- There are instances that indicate an elevated potential for third party damage
- Developers and contractors are performing a high number of excavations along a pipeline route in developing areas
- There are instances of problems identified with excavators use or lack of use of calling BTU Gas Company, Inc. before they dig.

9. Records

The Program Administrator shall maintain the following records:

- List, records and other documentation of stakeholder audiences with whom BTU Gas Company, Inc. has communicated,
- Copies of all materials provided to each stakeholder audience, and
- Results of pre-tests and effectiveness assessments, including follow-up actions and expected results.

These records shall be maintained for five (5) years.

APPENDIX A

Message Type, Content and Frequency

Stakeholder Audience

Pubic			
	Message	**Delivery**	**Frequency**
Residents along the distribution system	Purpose and reliability of pipeline Awareness of hazards and prevention measures Damage Prevention Awareness including One call requirments Leak Recognition and Response What to do and who to contact in an emergency	Public Service Announcement Paid Advertising Bill Stuffers Newspapers and Magazines Community Events Neighborhood Letters	**Annual**
Operators Customers	Awareness of hazards and prevention measures Damage Prevention Awareness Leak Recognition and Response What to do and who to contact in an emergency Carbon Monoxide Safety Near Gas Meters	Bill Stuffers Distribution of Printed Material	**Twice Annually**

APPENDIX A

Message Type, Content and Frequency

Stakeholder Audience

Emergency Officials and Public Officials			
	Message	**Delivery**	**Frequency**
Emergency Officials	Awareness of hazards and prevention measures Emergency Preparedness Pipeline Purpose and reliability What to do and who to contact in an emergency	Print Materials Group Meetings Telephone Calls Personal Contacts Videos and CD's	**Twice Annually**
Public Officials	Awareness of hazards and prevention measures Emergency Preparedness Pipeline Purpose and reliability What to do and who to contact in an emergency	Distribution of Printed Material Group Meetings Telephone Calls Personal Contacts	**3 Years**

APPENDIX A

Message Type, Content and Frequency

Stakeholder Audience

Excavators, Contactors and One Call Centers			
	Message	**Delivery**	**Frequency**
Excavators Contractors	Awareness of hazards and prevention measures Leak Recognition and Response Pipeline Purpose and reliability One Call Requirements How to get additional information	One Call Center Group Meetings Telephone Calls Open House Videos and CD's	**Annual**
Kentucky 811	Pipeline Location Other requirements of Kentucky Underground	Maps Membership in Kentucky Underground	Requirements of Kentucky Underground

All material sent or communicated to the public will include how to get additional information

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1 Operation & Maintenance Program

2 Operator Qualification Plan

3 Public Awareness Plan

4

5

Operation & Maintenance Program

BTU Gas Company, Inc.

BTU Gas Company
P.O. Box 707
Salyersville, KY 41465

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BTU Gas Company
Salyersville, Kentucky

Operating and Maintenance Plan

Basic Operating and Maintenance Plan Information

(1) **Purpose of the Plan.** This plan prescribes guidelines and minimum standards for the safe and reliable operation and maintenance of natural gas distribution systems.

(2) **Regulatory Requirements.** The Natural Gas Pipeline Safety Act of 1968 required the Department of Transportation to develop and enforce minimum safety regulations for transportation of gases by pipeline. These regulations are published in Title 49, Code of Federal Regulations, Parts 190,191,192, and 199.

Each gas operator is responsible for compliance with the above regulations and must remain familiar with the requirements contained within.

Gas operating and maintenance procedures are specifically required under 49 CFR 192.605.

(3) **Implementing the Plan.** The management of BTU Gas Company, Inc. is responsible for assuring that all persons having responsibility for operation, maintenance, and periodical inspection of this system are made aware of this plan and are properly trained and qualified to perform as required.

Records must be maintained to verify and document such training.

(4) **Omissions from Plan.** This plan is written to specifically include various topics of major significance to a gas distribution operator. All codes and standards incorporated by reference are to be considered as part of this plan to the extent that they are applicable.

No written plan is fully inclusive of all details pertinent to operation, maintenance, and inspection. Therefore industry accepted methods shall apply to those areas not specifically addressed in the plan.

(5) **Periodical Review of the Plan.** This plan shall be reviewed and revised at intervals not exceeding 15 months, but a least once each calendar year to reflect current regulatory requirements and changes in the system.

Each person responsible for implementation of this plan is encouraged to offer suggestions that would make this plan more effective.

(6) **Terminology.** Standard English dictionary definitions shall apply except where industry accepted terminology prevails. As used herein the following meanings and definitions apply:

Employee	Any person employed or authorized by the company to perform operating, maintenance, or construction functions related to the gas distribution system.
Gas	The combustible gas distributed for sale to customers of the company.
Personnel	Same as employee.
Main	A distribution pipe that serves as a common source for more than one service line.
Pipeline	All parts of the physical system that carry gas, including mains, service lines, and district regulator stations.

Employee Responsibilities

(1) **Recognition of Hazards.** Each employee shall remain aware of potential hazards resulting from natural gas leaks and other gas system malfunctions.

Such hazards include, but are not limited to:

a. Natural gas when mixed with air is combustible. It is easily ignited by open flame, electric spark including static discharge, or by spark from abrasion. The gas has a lower limit of flammability of approximately 5% and an upper flammability limit is approximately 15% by volume mixed with air.

b. Natural gas is lighter than air, with a specific gravity of approximately .6. Escaping gas will tend to rise from the point of escape and accumulate in higher locations.

Before working in an excavation where natural gas may be escaping, the atmosphere must be tested accordingly, and proper measures must be taken to eliminate the hazards and to protect the worker against injury resulting from accidental ignition or insufficient oxygen.

c. Natural gas escaping at high velocity through polyethylene pipe may cause a high voltage static electric discharge to occur, which may produce ignition under certain conditions. Specific precautions as described in "Prevention of Accidental Ignition OQ Task M-7" must be taken to minimize the danger of self-ignition from static electricity whenever a flammable gas is allowed to escape through plastic pipe.

d. Potential hazards exist anytime excavation work is performed or work is performed within an excavation. Damage or injury resulting from interference with underground electric wires, asphyxiation, and ignition of gas or cave-ins are all possible hazards.

e. All applicable company safety standards regarding personal protective equipment and work procedures must be followed to assure the safest possible work environment.

f. All reasonable precautions shall be taken to protect the public from hazards resulting from escaping gas, open excavations, or other dangers resulting from operation and maintenance of the gas distribution system.

(2) **Implementation of Emergency Operating Plan.** As required by 192.615, the BTU Gas Company, Inc. has a written emergency plan to address and minimize the hazard resulting from a gas pipeline emergency. The emergency plan specifically addresses for the following emergency situations:

a. Gas detected inside or near a building.

b. Fire located near or directly involving a pipeline facility.

c. Explosion occurring near or directly involving a pipeline facility.

d. Natural disaster affecting a pipeline facility.

e. Safe restoration of any service outage.

f. Any situation which requires prompt and effective response to eliminate potential for injury or property damage resulting from gas.

Customer Meters and Regulators

(1) **Location of Customer Meters and Regulators.** Each meter and service regulator must be installed in a readily accessible location and be protected from corrosion and other damage. Unless absolutely unavoidable, meters shall not be installed in any location where visits of the meter reader or tester will cause annoyance to the customer or severe inconvenience to the utility. Meters and regulators shall be installed outdoors whenever practical.

Meters in or near driveways or parking areas where subject to contact from vehicles shall be protected with suitable barricades.

Each regulator which might release gas in its operation shall be vented to an outside location where gas is not likely to accumulate at or below ground level, and will not be likely to enter any opening into a building or come in contact with an ignition source.

Where more than one meter is placed at a single location, each meter shall be marked to identify the customer served.

(2) **Specific Requirements for Service Regulators.** Each service regulator used must be capable of reducing distribution line pressure to the pressure recommended for household appliances.

All atmospheric vents on service regulators and relief valves must be insect resistant and protected against entry of rain or accumulation of water from condensation.

(3) **Installation of Customer Meters and Service Regulators.** Each meter and regulator installation must be properly supported and designed to minimize anticipated stresses upon connections and piping. Use of all-thread (close) nipples is prohibited for gas carrying piping.

(4) **Meter Valves.** Each service line valve installed above ground must be designed and constructed in a manner in which the possibility of removal of the core with other than specialized tools is minimized.

Excess Flow Valves

Beginning June 1, 2008, the BTU Gas Company, Inc. will install excess flow valves on all single residence service lines operating at over 10 PSIG. The valves will be installed at the BTU Gas Company, Inc.'s expense. They will be installed according to 49 CFR Part 192 and the manufacturer's installation instructions.

Service Lines

(1) **Installing Service Lines.** Each service line must be installed and connected to the main by qualified personnel in accordance with the construction specifications set forth in the appendix of this procedures manual and Operator Qualification manual H-2.

All materials used must be of good quality and intended for use with natural gas. All pipe and fittings used must be manufactured and tested in accordance with applicable listed specifications.

(2) **Testing Service Lines.** Each new service line must be pressure tested for leaks using air, inert gas, or other suitable test medium prior to being placed into operation. A good quality mechanical or electronic gauge must be used to monitor the test pressure for as long as necessary to discover any potentially hazardous leaks. If feasible the service line connection to the main must be included in the test; if not reasonable, the connection to the main must be leak tested at operating pressure when placed in service. In conducting pressure tests reasonable precautions shall be taken to protect employees and the general public from injury in the event of a failure of the service line or test apparatus.

Each disconnected service line must be tested in the same manner as a new service line from the point of disconnection to the meter valve prior to being put into operation.

Minimum test pressure for steel service lines intended to operate at 1 PSIG or less shall be 10 PSIG for five minutes.

Minimum test pressure for steel service lines intended to operate from 1 PSIG to 40 PSIG shall be 50 PSIG for not less than five minutes

Minimum test pressure for steel service lines intended to operate from 40 PSIG to 100 PSIG shall be 90 PSIG for not less than five minutes.

Minimum test pressure for steel service lines intended to operate at 100 PSIG or over shall be 1.5 times maximum operating pressure for not less than five minutes

Minimum test pressure for plastic service line shall be 50 PSIG or 1.5 time maximum operating pressure whichever is greater for five minutes.

Existing service lines not physically disconnected shall be tested at operating pressure for not less than 3 minutes.

(3) **Operation of Service Lines.** Service lines, including customer meters and service regulators, must be included in the continuing surveillance program, corrosion control program, and periodic leakage survey.

(4) **Maintenance of Service Lines.** All repairs to service lines must be made by qualified personnel using approved materials and methods as specified in the repair specifications in the appendix of the procedure.

In the event that gas is escaping from a damaged service line, reasonable precautions shall be taken to prevent accidental ignition and to protect employees and the general public from dangers that may result from oxygen deficiency or ignition of gas.

Each service line abandoned in place must be disconnected from the source of gas as close to the main as possible and the pipe ends sealed.

Corrosion Control

(1) **Atmospheric Corrosion Control.** Each above ground pipeline or portion thereof which is exposed to the atmosphere and which carries gas under pressure must be painted, coated or jacketed with a material suitable to prevent atmospheric corrosion. This includes exposed piping at distribution regulator stations, service risers and piping at customer meter and regulator installations, exposed pressure regulators, monitor regulators, relief valves and fittings, and all other exposed gas carrying main or service line piping.

At intervals not to exceed three years, each above ground pipeline or portion thereof must be inspected for atmospheric corrosion. If atmospheric corrosion is found, proper remedial action must be taken to prevent further corrosion. If a paint or surface coating is used, the manufacturer's instructions should be followed for proper surface preparation and applications.

(2) **External Corrosion Control, Buried Piping.** All buried gas carrying metallic piping must be effectively protected against external corrosion. Such protection may be provided by each of the following:

a. All buried metal surfaces must be coated with a factory applied or field applied coating specifically designed to prevent underground corrosion.

b. Cathodic protection must be provided by maintaining a pipe to soil potential of at least negative .85 volts and measured through a copper sulfate half-cell. Protective voltage is normally provided by means of magnesium anodes.

c. The cathodically protected section must be electrically isolated from other metallic structures above or below ground.

Each pipeline that is under cathodic protection must be tested at least once each calendar year, at intervals not to exceed 15 months. Isolated short sections of cathodically protected piping, such as on service risers, may be tested on a sampling basis if annual testing is not practical. At least 10% must be sampled each year distributed over the entire system, with a different 10% each subsequent year such that the entire system is sampled in a ten-year period.

(3) **Qualifications for Corrosion Control Personnel.** All personnel conducting electrical surveys of cathodically protected facilities must be properly trained to use and maintain the instruments and to interpret the results. Corrosion Personnel must be qualified as outlined in the BTU Gas Company, Inc.'s Operator Qualification Plan

Proper procedures must be followed for installation of anodes and application of protective coatings.

(4) **Corrosion Control Records.** Records shall be maintained to show the locations of cathodically protected piping and facilities, and results of surveys and tests including remedial actions, for as long as each facility is in service.

Records must be in sufficient detail to demonstrate the adequacy of the corrosion control program, including control of atmospheric corrosion. However, cathodic protection records may be maintained separately from atmospheric corrosion surveillance records.

Continuing Surveillance

(1) **Scope of Surveillance Program.** Each employee responsible for operation or maintenance is to remain attentive to conditions affecting the safety and reliability of the gas system and its components, and is to continually observe for such conditions during the performance of duties.

This surveillance is to include conditions surrounding or adjacent to the system which may lead to hazards.

(2) **Specific Surveillance Guidelines.** The continuing surveillance program includes, but is not limited to observation for the following conditions:

- Excavation or construction activities near buried facilities.
- Mains or service lines exposed by soil erosion.
- Evidence of leaking gas from mains or service lines.
- Permanent or mobile dwelling units or other building structures placed or constructed over buried service lines or mains.
- Damaged customer metering facilities.
- Customer metering facilities in need of barricade protection.
- Atmospheric corrosion or rust on customer meters and associated piping.
- Abnormal pressure readings on system gauges.
- Missing locks or ineffective security on bypass valves or other valves, which could cause a system malfunction if operated by, unauthorized personnel.
- Required pipeline markers missing, damaged, or severely faded.
- Rooms, garage, carport, or other structures built over a service line or main

(3) **Remedial Actions.** Any deficiencies must be acknowledged and appropriate remedial action initiated in accordance with the degree of urgency appropriate for the conditions observed.

Serious leaks or other imminent dangers must be given immediate attention, whereas atmospheric corrosion or other conditions not immediately hazardous may be scheduled for timely repair.

(4) **Surveillance Records.** Records shall be maintained of the deficiencies found and the remedial actions taken. Location, date, description, and identity of worker should be included.

Damage Prevention

The BTU Gas Company, Inc. will meet the requirements of 192.614 through participation in the states 811 one call system and their Public Awareness Plan

Line Markers

Line Markers will be placed and maintained as close as practical over each buried main and transmission line except those in Class 3 or Class 4 locations where covered by the BTU Gas Company, Inc. damage prevention program.

The markers will contain the words, "Warning," Caution" or "Danger" followed by the words "Natural Gas Pipeline along with the name "BTU Gas Company, Inc." and the phone number where the operator can be reached at all times.

Investigation of Failures

(1) **Scope of the Program.** All accidents and failures directly involving the gas system must be investigated for the purpose of determining their cause, so that appropriate actions may be taken to minimize the probability of recurrence.

(2) **Guidelines for Investigation of Failures.** All leaks in service lines or mains, over pressure conditions, system outages, or inadequate delivery pressure occurrences are considered as failures and should be investigated to determine factors which contributed to or directly caused the failure.

Leaks in polyethylene resulting from failed heat fusion or mechanical joints, or stress cracking in the pipe wall should be thoroughly investigated including laboratory analysis. If the cause of the failure is determined to be from defective material or defective workmanship a plan must be developed to locate other areas which may be affected, and to perform leakage surveys in locations within those areas where failure would present the greatest hazards. Current joining methods are to be reviewed to assure that written procedures are being followed by properly trained and qualified personnel.

Malfunctions of pressure regulating or over pressure protection devices must be investigated to determine whether the failure was caused by poor maintenance, defective material, or outside forces. If other pressure controlling devices are likely to be affected in the same manner, a program shall be implemented to check such devices on a sampling basis.

Tapping Under Pressure

(1) **Qualification of Personnel.** Each tap made on a pipeline under pressure must be made by personnel properly trained and qualified to make hot taps. Such training shall include recognition of hazards that may result from escaping gas as well as specific knowledge of the procedures for ignition prevention and control, and protection of personnel.

(2) **Safety Precautions.** All applicable safety procedures shall be followed to assure protection from injury resulting from accidental ignition or oxygen deficiency.

Regulator Inspections

(1) **Pressure Regulators**. Each pressure regulator used for pressure reduction or for pressure limiting should be inspected once each calendar year not to exceed 15 months.

The inspection will ensure that each regulator is in good working order, controls at its set pressure, operates or strokes smoothly and shuts off within the expected and accepted limits.

(2) **Additional Inspections.** A visual inspection shall be conducted to assure that building, fences, storm drainage and exposed piping and equipment are in acceptable condition. All exposed piping and equipment should be visually inspected for evidenced of atmospheric corrosion. An inspection or test of stop valves should be made to ensure that the valves will operate and are correctly positioned.

(3) **Relief Valves.** Each relief valve and other overprotection devise will be inspected at least once each calendar year not to exceed 15 months. The inspection shall include but is not limited to:

- checking the set-point pressure, inspecting the relief valve
- Inspecting the relief valve, branch piping and stack to ascertain they are in good mechanical condition
- Check for evidence of tampering
- Check for signs of atmospheric corrosion.
- Ensure plugs are in the test connectors.

Maximum Allowable Operating Pressure

The maximum allowable operating pressures (MAOP) for pipelines and pipeline facilities shall be established by using guidelines as set forth in 49 CFR Part 192.

BTU Gas Company, Inc. is responsible for insuring the maximum allowable operating pressure, which have been determined for each pipeline, are not exceeded. It shall be responsible for establishing and maintaining system MAOP records on all pipelines.

Emergency Valve Inspections

Designated Emergency Valves shall be inspected each calendar year not to exceed 15 months. The inspection shall include the following:

- Verify that the valve location measurements in valve book is correct
- Clean debris from the valve box to make operating the valve easier
- Verify that the type and size of the operating nut or curb valve type matches the listing can be operated with the keys and tool normally carried by gas company personnel
- Verify the valve box lid is clearly identified with he word "Gas'
- Verify the valve number identification for each valve
- Check the pipeline faculties for atmospheric corrosion
- Partially operate the valve to ensure it is operable
- Lubricate the valve if necessary.

Odorization

(1) **Odorant Requirements.** Combustible gas transported through distribution pipeline, must contain an odorant so that it is readily detectable by a person with normal sense of smell at a concentration of one-fifth its lower explosive limit in air.

The odorant used must not be harmful to the materials used in the piping system or to people, and must not produce harmful products of combustion.

(2) **Sampling for Odorant.** Natural gas is monitored for odorant as required by 49 CFR 192.625 and 807 KAR 005 022.

Purging

(1) **Required Purging.** Whenever a main or service line is being put into service, it is necessary for all air or other non-combustible gas to be purged from the line.

(2) **Safety Precautions.** If a polyethylene main is being purged, special precautions must be followed to prevent static electricity from discharging and igniting the escaping gas. Such precautions are described in "Prevention of Accidental Ignition Operator Qualification Task M-7."

Anytime air is being purged with gas, or gas is being purged with air, it is necessary to maintain a rapid flow rate. This will ensure turbulence at the gas/air interface, minimizing the size of the combustible mixture zone.

Care must be taken to ensure that gas is not discharged in an area in which it will accumulate and create a hazard. Potential ignition sources must be kept away.

Leakage Survey

(1) **Frequency of Surveys.** Leakage surveys must be conducted as often as needed to discover leaks, which could result in a hazard. Leakage survey with leak detector equipment must be conducted in business districts at intervals not exceeding 15 months, but at least once each calendar year. Outside business districts intervals must not exceed 5 years, however for catholically unprotected distribution lines intervals may not exceed 3 years.

Additional surveys are necessary to assure that leaks have not developed following earthquake, major excavation activities, blasting, washout, landslide, or ground settlement near gas pipeline facilities.

Additional survey may be required as a result of investigation of a failure as covered in "Investigation of Failures."

(2) Method of Performance of Leakage Survey.

Leakage survey may be conducted using either the surface or subsurface method.

A surface gas detection survey is a continuous sampling of the atmosphere performed using either portable or mobile equipment. Sampling is conducted at ground level for buried gas facilities and adjacent to above-ground facilities with a gas detector system capable of detecting a concentration of 50 ppm or gas in air at any sampling point.

Subsurface gas detection survey shall consist of testing bar holes with a combustible gas indicator or other instrument capable of detecting 10% or less of the lower explosive limit. The bar holes should penetrate to the depth of the main as close as practical to the main, taking care to avoid damaging the main. The sample should be drawn from near the bottom of each hole, taking care to avoid drawing water into the instrument. The instrument used should be equipped with a device to prevent liquid from being drawn.

Spacing of bar holes may be determined in accordance with the proximity to buildings and underground structures, such as sewers and manholes. In those areas where leaking gas would present the greatest hazard spacing should be closest. In all cases bar hole samples shall be taken near the service riser at the customer's meter. Areas in which service lines are near sewer lines or building foundations shall be sampled at intervals as close as necessary, but not to exceed 20 feet. Catch basins, manholes, and other underground structures near mains and service lines should be tested near the bottom.

Spacing of bar holes for surveying mains in close proximity to buildings or underground structures should be at intervals of twenty feet or less.

Sewers, catch basins, ditch lines and other low areas in the proximity of mains and services shall be tested for gas as part of any leakage

(3) **Grading Leaks.** Each leak discovered must be graded according to the following:

(a) **Grade 1 - Hazardous Leak.** Any leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until conditions are no longer hazardous is considered a Grade 1 leak. A leak which results in a measurable quantity of gas migrating into any buildings used for human occupancy or concentration of 50% or more of the lower explosive limit in a sewer, manhole, or other underground structure is Grade 1.

(b) **Grade 2 – Non-hazardous Leak.** Any leak that is recognized as being non-hazardous at the time of detection but justifies scheduled repair based on probable future hazard.

Generally an outdoor leak in a main or service line and in which gas is not migrating into or near a building or underground structure is Grade 2. A leak that results in a slight concentration of gas migrating into a sewer, manhole or other underground structure away from any building used for human occupancy may be a Grade 2.

(c) **Grade 3 - Nuisance Leak.** Any leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous (less severe than a Grade 2.) may be considered to be a Grade 3 leak.

A very small leak, such as a fitting or valve on a meter loop, where the source of the leak is apparent and predictable may be Grade 3.

(4) **Disposition of Leaks.** Any Grade 1 leak must receive immediate action to control the escape of gas or otherwise eliminate likely hazards. Normally the source of gas to the leak will have to be shut off using valves.

A Grade 2 leak may be scheduled for repair in a timely manner. Anticipated cold weather should be considered when scheduling repairs. Freezing ground surface may stop the ventilation of gas and force migration below ground. Also, interruption of service to customers presents greater hardship in cold weather.

Any Grade 2 leak not repaired within 6 months should be rechecked to assure that it has not become more hazardous.

A Grade 3 leak is not required to be repaired, but must be monitored annually to verify its classification. If the leak becomes severe enough to be classified as Grade 2, it must be scheduled for repair accordingly.

Records must be maintained of each leakage survey to document the areas surveyed and results. Survey dates, description of survey area, addresses of locations of leaks and their grades, type of instruments used, survey method, and names of survey technicians should be included.

(5) **Leak Records.** Records must be kept for all leaks reported to the company or discovered by the company or its employees. Records must be retained for at least 5 years and must contain address or location, method of detection or receipt of notice, date of detection, date of repair, follow-up surveillance dates, grade, and description of cause and method of repair for each leak.

The leak records kept should contain information consistent with the annual reporting requirement of 49 CFR 191.11.

Abandonment or Inactivation of Facilities

Each pipeline abandoned in place must be disconnected from all sources of gas and purged if the volume of gas contained is sufficient to present a hazard. The open pipe ends are to be sealed in a gas tight and water tight manner using an appropriate mechanical fitting, heat fusion, expanded foam or other effective method.

Whenever service to a customer is discontinued one or more of the following actions must be taken:

a. The valve that is closed to prevent the flow of gas to the customer must be locked or otherwise prevented from operation by unauthorized persons.

b. A mechanical device or fitting must be installed in the service line or meter assembly to prevent the flow of gas. A disc installed between the meter inlet and swivel is sufficient for this purpose.

c. The customers piping must be disconnected from the supply of gas and the open pipe ends sealed.

If a customer is permanently disconnected or is expected to be discontinued for an extended time period, the service line should be disconnected either at the main or at the entrance to the customer's property.

Records should be maintained of inactive facilities to show the locations, dates, methods of isolation from gas, and other information, which will be needed later to properly return to service.

Preventing Accidental Ignition

(1) **Scope of the Program.** Steps must be taken to minimize the probability of ignition of gas anytime gas is blowing to atmosphere, and in which ignition would present a danger to the public, personnel, or property.

(2) **Specific Precautions to Take.** Whenever a hazardous amount of gas is being discharged into open air the following precautions shall be taken:

a. Avoid discharging natural gas into a confined space.

b. If in an area where public access is likely place barricades, traffic cones, or other controlling devices with suitable warning signs to limit ingress by the public.

c. Remove all apparent sources of ignition from the area of escaping gas. Motor operated equipment, open flame, smoking tobacco, two-way radio equipment, and electric switches are all possible ignition sources.

d. Avoid wearing nylon, polyester, or other synthetic clothing while working around escaping gas. Synthetic materials are capable of producing static electricity, particularly when the humidity is low.

e. Test for presence of combustible gas in excavations before entering. Avoid entering if combustible gas is present at a concentration of greater than 20% of the lower explosive limit. Use mechanical blowers if necessary to maintain less than 20% L.E.L. when working in excavation.

f. Do not perform cutting, welding, heat fusion or other mechanical operations on mains containing gas-air mixtures. Mains must contain 100% gas or 100% air (or inert gas) when construction or maintenance work is performed.

g. Whenever separating metallic pipe, such as at a customer's meter loop, place an electrical bond wire around the area of separation to maintain electrical continuity and eliminate sparking.

h. Whenever gas is discharging from plastic pipe special precautions shall be taken to prevent static discharge and spontaneous ignition.

(3) **Special Precautions for Polyethylene Pipe.** Gas flowing at high velocity through polyethylene pipe may create a static electric charge on the wall of the pipe and on any particles of foreign material carried in the gas stream. This can cause ignition of the flowing gas to occur spontaneously. There are certain precautions that can be taken to minimize this probability of occurrence.

a. When a plastic main or service line is punctured and must be squeezed to stop the flow of gas the squeezing should be done from a second hole a safe distance from the escaping gas.

b. Wet cloth, cotton, canvas, burlap, or other natural fabric should be wrapped around the damaged or open pipe near the point of discharge. The wet fabric must contact the ground, and the ground must be damp or wet. Liquid detergent should be mixed with the water used to wet the rags.

c. A metal pipe should be used as the final discharge stack for purging or otherwise blowing gas to atmosphere. The metal pipe must be electrically grounded using a stranded copper wire and ground rod. The polyethylene pipe exposed proceeding the transition to the metal pipe should be wrapped with wet fabric as stated in (b).

Employee Protection

The BTU Gas Company, Inc. will take adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas, and, making available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and, a rescue harness and line

APPENDIX A - CONSTRUCTION AND REPAIR

All construction and repair of gas carrying facilities in the gas distribution system must comply with the requirements of 49 CFR Part 192. This appendix contains a summary of construction and maintenance requirements for polyethylene systems that will help to ensure compliance with these regulations.

I. Qualification of Materials

All pipe, fittings, valves, and other components which carry gas under pressure must be chemically compatible with the gas being transported and must be designed to withstand the stresses which result from the intended operation.

All plastic pipe which carries gas must be polyethylene and must be manufactured in accordance with specification ASTM D2513. Pipe qualified under this specification must be marked at intervals of two feet (or less) showing ASTM D2513, brand name, material grade, nominal size, wall thickness or SDR, and other batch identification. Polyethylene grades PE 2306, PE 2406, and PE 3408 all are acceptable grades. The grade designation will normally be followed by a three-letter suffix that indicates an elevated temperature, its corresponding strength, and the melt index for the material.

Minimum wall thickness should correspond with the following table for polyethylene pipe: (all dimensions in inches)

1/2" CTS (.625 O.D.)	.090 (SDR 7)
1/2" IPS (.840 O.D.)	.090 (SDR 9.3)
3/4" IPS (1.050 O.D.)	.095 (SDR 11)
1" CTS (1.125 O.D.)	.099 (SDR 11.5)
1 1/4" IPS (1.660 O.D.)	.166 (SDR 10)
2" IPS (2.375 O.D.)	.216 (SDR 11)

Each heat fusion fitting for polyethylene must be made of a grade of polyethylene compatible with the pipe used. A qualified written procedure must be available for joining the fitting to the pipe.

Each plastic mechanical fitting used to join polyethylene pipe to polyethylene pipe must be made of a grade of a plastic material compatible with the gas being transported. An internal stiffener must be used to reinforce each pipe end, and must be the proper diameter for the size and wall thickness of the pipe. Gasket or compression ring material must be suitable for use with the natural gas.

Metal-bodied fittings are not desirable for joining polyethylene to polyethylene pipe below ground due to the need for cathodic protection and corrosion control surveillance.

Metal bodied transition fittings may be used to join polyethylene pipe to cathodically protected steel pipe below ground, or to steel pipe above ground. Each fitting must have a properly designed stiffener and gasket or compression ring material must be suitable for use with natural gas.

Qualified written procedures must be available for all mechanical fittings used with polyethylene pipe.

All steel pipe used at meter loops must be of a listed API or ASTM specification and must be schedule 40 or heavier wall thickness.

All fittings used at meter loops must be marked to show brand name or trademark and must be malleable iron or steel. Fittings must be designed for at least 150 PSIG working pressure and be of standard dimensions.

Meter valves must be tamper proof, such that the core is not easily removed with ordinary hand tools. Marking must include brand or trade name, pressure rating, "G" or other designation for gas, and "T" or other designation for tamper proof construction.

II. Qualification of Personnel

All personnel engaged in the construction and repair of mains and service lines must be qualified as outlined in the BTU Gas Company, Inc.'s Operator Qualification Plan.

Each person who will be making a joint on polyethylene pipe, whether polyethylene to polyethylene or polyethylene to steel, must be certified in the use of the qualified written procedure for the joint being made. All provisions of 49 CFR 192.285 will be followed.

Welding on steel piping must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 incorporated by reference in 49 CFR Part 192.7.

III. Planning Construction of Mains

Prior to start of construction a comprehensive plan should be made. Limits of public right-of-way or easements and locations of other utilities, which may affect the proposed construction, need to be determined. The location selected for the proposed main must take interference with other utilities and other conflicts into consideration. Affected property owners and other utilities should be advised of proposed construction. Application should be made for state and local permits when required.

The proposed main shall be designed of proper size to supply present and anticipated future demand. The maximum allowable operating pressure for polyethylene mains carrying natural gas may not exceed 60 PS1G.

IV. Installation of Mains

Distribution gas mains must be installed with 24-inch minimum cover. Where an underground structure prevents having 24 inch cover other precautions must be taken to protect the main against damage from anticipated external load or dig-in. Where feasible, a minimum of 12 inches shall be maintained between a main and other underground structure or pipeline.

Polyethylene mains may not be installed above ground unless fully encased in a steel pipe.

Polyethylene mains must be installed resting on well-compacted soil free of foreign objects or sharp rocks that may gouge or puncture the wall of the pipe. Backfill material must be free of sharp rocks or other material that may damage the pipe. If necessary sand backfill shall be compacted 6" minimum in each direction above, below, and beside the pipe to provide a cushion against damaging materials.

Polyethylene pipe must be transported and handled with care to avoid damage. Each section of pipe shall be visually inspected before being lowered into the trench. Any cuts or gouges that are 10% or more of the wall thickness in depth shall be repaired by removal of a section of pipe containing the damage.

Polyethylene pipe must not be stored for extended periods in direct sunlight. The pipe manufacturers' guidelines should be followed.

A tracer wire must be installed with polyethylene pipe. Solid or stranded copper wire, number 12 AWG or larger, insulated with plastic or rubber is recommended. The tracer wire should be electrically continuous with the tracer wire for each service line to provide accessibility for line locating. To

the extent practical, physical contact between the tracer wire and main should be avoided to minimize potential damage from lightning.

As additional protection against third-party damage, installation of warning tape approximately 12 inches below the surface and directly above ground is recommended.

V. Inspection of Mains

Each main installed must be inspected by a properly trained and qualified person prior to being put into operation. This inspection is to ensure proper installation and joining and shall include the following:

a. Credentials of each person making joints in polyethylene pipe must be verified to be current for the procedures being performed.

b. All joints must be visually inspected for compliance with qualified written installation

c. The condition of the bottom of the ditch shall be checked to assure the pipe is resting on smooth and well-compacted soil, free of materials which may damage the pipe.

d. The tracer wire must be examined to ensure continuity and accessibility after backfill.

e. Depth of burial shall be checked.

f. Surface of pipe shall be visually inspected for damage. Any pipe containing cuts or scratches penetrating 10% or more into the pipe wall must be cut out and replaced.

g. Marking on pipe and fittings must be checked to verify compliance with material specifications.

h. Backfill material must be checked for metal, sharp rocks, building scraps, or other materials that may damage the pipe surface.

VI. Testing Mains

Each main or section of polyethylene main must be tested to at least 150% of the maximum operating pressure, but not less than 50 P51G. before being placed into operation. Air, carbon dioxide, or nitrogen are acceptable test mediums. The test must be left on long enough to discover any potentially hazardous leaks. The final tie-in to an existing main may be leak tested at operating pressure with gas.

Any leaks discovered must be repaired.

VII. Main Records

Records must be retained for the useful life of each main to include at least the following:

a. The name of the company operating the main.

b. Test results including pressure, duration and medium used.

c. Leaks or failures discovered during test and remedial action taken.

d. Size, wall thickness, material designation, brand

e. Location of main and depth of burial.

f. Date of installation.

g. Name of contractor used for installation and testing.

h. Name of employee inspecting or supervising installation.

i. Any other information deemed appropriate.

VIII. Service Line Installations

Service lines must be installed with a minimum of 18 inches cover in public right-of-way and 12 inches cover in private property.

Polyethylene service lines must be installed on well-compacted soil free of foreign material or sharp rocks that may gouge or damage the wall of the pipe. Backfill material must be free of sharp rocks or other material that may damage the wall of the pipe. If necessary, sand backfill shall be compacted in each direction above, below, and beside the service line for protection.

Polyethylene pipe must be handled and transported with care to avoid damage. Each section shall be inspected before installation for evidence of deep scratches, cuts, or gouges which penetrate 10% or more of the wall thickness. Damaged pipe shall not be installed.

Polyethylene service pipe shall not be stored or exposed to direct sunlight for extended time periods.

A tracer wire must be installed with polyethylene service lines. Solid or stranded copper wire, number 12 AWG or larger, rubber or plastic insulated may be used. The tracer wire should be electrically connected with the tracer wire at the main, and should be brought above ground at the meter riser. Physical contact between the tracer wire and the service line should be avoided to minimize potential damage from lightning.

Connection to the main may be made using approved mechanical fittings or heat fusion fittings. A person certified to be qualified in the use of the procedure must follow qualified written procedures.

Polyethylene pipe must be shielded from exposure to sunlight or physical force when brought above ground. Anodeless risers or service head adaptors that encase the polyethylene pipe to an above ground transition may be used at meters.

Underground connections between service lines and mains or other fittings may be protected against shearing force from ground settlement with a sleeve of larger rigid plastic pipe. This sleeve may be any commercial grade of plastic.

Meter locations, meter supports, barricading. pressure testing, and record-keeping shall be completed in accordance with information included in "Customer Meters and Regulators" and "Service Lines."

IX. Repairs to Mains and Service Lines

All repairs to polyethylene mains and service shall be made by removal and replacement of the damaged pipe. As with initial installation only approved mechanical or heat fusion fittings may be used by qualified personnel in accordance with qualified written procedures.

All applicable precautions shall be taken to ensure safety to the public and personnel.

Operator Qualification Program

BTU Gas Company, Inc.

BTU Gas Company
P.O. Box 707
Salyersville, KY 41465

Table of Contents

1. INTRODUCTION

1.1. Scope

The Office of Pipeline Safety (under the Department of Transportation's *Research and Special Programs Administration*) issued a final rule for Operator Qualification on August 27, 1999. This final rule, *Pipeline Safety: Qualification of Pipeline Personnel*, is set forth in 49 CFR subparts 192.801 through 192.809. A copy of the final rule and its preamble are included in **Appendix A** of this OQ Program. The final rule became effective October 26, 1999 and amended March 3, 2005

The following Operator Qualification Program (OQ Program) identifies the procedures BTU Gas Company, Inc. will use to comply with these minimum pipeline safety regulations.

BTU Gas Company, Inc. is committed to operate its pipelines safely by ensuring that it has a qualified workforce and that its operations comply with relevant Federal Pipeline Safety Regulations.

1.2. APPLICATION

This OQ Program applies to all individuals given authority by BTU Gas Company, Inc. to perform covered tasks as defined herein, whether they are employed by

- BTU Gas Company, Inc.
- Its contractors;
- A sub-contractor for a contractor; or
- Any other entity performing covered tasks on behalf of BTU Gas Company, Inc.

1.3. Key OQ Program Dates

This OQ Program became effective on February 1, 2010.

BTU Gas Company, Inc. will make future revisions to its OQ Program when required for the safe and efficient operation of its natural gas distribution system. Documentation of such changes will be listed in **Appendix B** of this OQ Program.

All individuals authorized by BTU Gas Company, Inc. to perform respective cover tasks will be qualified by April 9th 2010 or prior to performing respective covered tasks after this date, if the individual is not under the direct supervision of someone who is qualified to perform the covered task.

2. DEFINITIONS

Abnormal Operating Condition - A condition identified by BTU Gas Company, Inc. that may indicate a malfunction of a component or a deviation from normal operations that may indicate an operating condition that could exceed design limits or result in hazard(s) to persons, property, or the environment.

Covered Task - An activity, identified by BTU Gas Company, Inc. that:

- is performed on a pipeline facility;
- is an operations or maintenance task;
- is performed as a requirement of 49 CFR part 192; and
- affects the operation or integrity of the pipeline.

Direct Observation- Observation of an unqualified individual(s) during the performance of a covered task by an individual who is qualified to perform the task(s) at hand. The observer must be in direct visual and verbal contact with the individual(s) and must be able to take immediate and effective corrective action if incorrect procedures or AOCs are observed.

Evaluation – A documented process, established by BTU Gas Company, Inc., to determine an individual's ability to perform a covered task.

Evaluator – A person who composes methods of evaluation and/or the person who performs evaluations. An evaluator should possess the required knowledge to ascertain an individual's ability to perform covered tasks and to substantiate an individual's ability to recognize and react to abnormal operating conditions that may be reasonably expected to surface while performing those tasks.

Individual - An employee of BTU Gas Company, Inc. or an employee of its contractors or their sub-contractors who, on behalf of BTU Gas Company, Inc., performs one or more Covered Tasks on its natural gas pipeline facilities.

Knowledge, Skills, and Abilities (KSA)- An appropriate combination of information, craftsmanship, and proficiency that allows an individual to perform covered task(s) in a competent manner

Operator - BTU Gas Company, Inc. who owns and/or operates natural gas pipeline facilities regulated by 49 CFR Part 192.

Pipeline Facility - Pipelines, rights-of-way, and any equipment, facility, or building used in the transportation of natural gas.

Pipeline or Pipeline System - All parts of a pipeline facility which contain natural gas including, but not limited to, pipe, headers, valves, regulator stations, meters and other controlling or measuring devices connected to the pipeline.

Qualified Individual - An individual who has been through the evaluation process and can (a) perform assigned covered tasks and (b) recognize and react to abnormal operating conditions that may be reasonably expected to surface while performing those tasks.

Work Performance History Review – The process of reviewing an Individual's work history to:

- search existing records for documentation that their past performance of covered tasks shows no operational errors that resulted in an abnormal operating condition, exceeded design limitations, or resulted in a hazard(s) to persons, property, or the environment;
- document that they have successfully performed the covered task(s) periodically prior to the effective date of the final rule discussed herein; and
- document that they can recognize and react to an abnormal operating condition.

3. COVERED TASKS

3.1. Identification of Covered Tasks (192.805 a)

BTU Gas Company, Inc. conducted an analysis of the operations and maintenance activities performed on its pipeline facilities. It then applied the following four-part test (as set forth in 49 CFR Subpart 192.801) to each of these activities to determine its list of "Covered Tasks":

- **Is the task performed on a pipeline facility?**
  Tasks on components, piping, or equipment physically disconnected and removed from the pipeline system are not covered tasks.

- **Is the task an operations or maintenance task?**
  Construction is not included except tie-ins to existing pipeline systems.

- **Is the task performed as a requirement of 49 CFR Part 192?**
  When a task is not required by DOT regulations it is not a covered task.

- **Does the task affect the operation or integrity of the pipeline?**
  The term "operation" is used here in the safety context of normal versus abnormal operation, where the latter could result in an unsafe condition. The "integrity of the pipeline" refers to the pipeline's ability to operate safely and to withstand the stresses imposed during operations.

3.2 List of Covered Tasks

Covered Tasks for BTU Gas Company, Inc. are listed in **Appendix C** of this OQ Program.

3.3 Assignment of Covered Tasks

It is the responsibility of Richard Williams, V.P. Operations of BTU Gas Company, Inc. to assure assigned work will be based on which of its employees are qualified to perform respective covered tasks. When issuing work assignments to contractors, notification will be provided on any covered tasks, as identified by BTU Gas Company, Inc. that must be performed as part of the respective work assignments.

4. EVALUATION/QUALIFICATION PROCESS AND METHODS (192.805 B)

4.1. General

Evaluations shall be an objective, consistent process that documents an individual's ability to perform the covered task. This includes the individual's ability to recognize and react to abnormal operating conditions that BTU Gas Company, Inc. could reasonably anticipate the qualified individual would encounter while performing the covered task.

Evaluators responsible for evaluating an individual's qualifications to perform respective covered tasks must have the required knowledge, through training or experience, to ascertain an individual's ability: (1) to perform Covered Tasks; and (2) to recognize and react to abnormal operating conditions that might surface while performing those tasks.

BTU Gas Company, Inc. will recognize the qualification of individuals to perform specified covered tasks provided acceptable documentation is available in advance of work performance. These qualifications must have been performed by an agency, contractor, other natural gas operator, institution, etc recognized by BTU Gas Company, Inc. as having an acceptable evaluation process for the specified covered tasks performed on their natural gas distribution system. In accepting qualifications of others, BTU Gas Company, Inc. recognizes that differences may exist. If differences do exist, they will be recognized and addressed individually. A list of these recognized evaluation resources are maintained in **Appendix D** of this OQ Program.

4.2. Evaluation Methods

Evaluation methods and qualification criteria applied to a Covered Task will vary from task to task. The evaluation method chosen for any specific Covered Task includes one or more of the following:

- Written examination
- Oral examination
- Work performance history review
  NOTE: **This method will not be used as the sole evaluation method for initial qualification after October 28, 2002.**
- Observation during:
  - Performance on the job

  NOTE: **This method will not be used as the sole evaluation method for qualification after December 16, 2004.**
  - On-the-job training
  - Simulation
- Other forms of assessment (i.e. third party schools, recognized evaluation services, etc)

4.3. Types of Evaluation/Qualification

4.3.1. **Transitional qualification**: The qualification of Individuals who (1) performed one or more Covered Tasks on a regular basis prior to August 27, 1999; and (2) qualify to perform those same Covered Tasks, according to this Plan, prior to October 28, 2002.

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4.3.2. **Initial qualification**: The qualification of Individuals who did not perform a particular Covered Task on a regular basis prior to August 27, 1999 (the effective date). NOTE: Initial qualification will be used for new employees hired after August 27, 1999. NOTE: **Work performance history review will not be used as the sole evaluation method for initial qualification after October 28, 2002.**

4.3.3. Subsequent qualification: The future evaluation of an Individual's qualification to perform one or more Covered Tasks, after the Individual's transitional or initial qualification to perform the same Covered Tasks, will be at intervals established by BTU Gas Company, Inc. The subsequent qualification process may utilize different evaluation criteria than were used for transitional or initial qualification. The frequency of subsequent evaluations is listed with respective covered tasks in **Appendix C**. The following factors were used in setting these frequencies:

- Complexity;
- Frequency of performance
- Level of risk or safety sensitivity;
- Repetitive nature; and
- Statutory Requirements

4.4. Use of Non-Qualified Individuals (192.805 c)

BTU Gas Company, Inc. permits non-qualified Individuals to perform Covered Tasks if:

- A qualified individual is assigned to direct and **directly** observe non-qualified individual(s) during the performance of a Covered Task.
- A qualified individual is able to take immediate corrective actions when necessary.
- The ratio of non-qualified individuals to a qualified individual should be kept to a minimum.

4.5 Re-evaluation of Qualification

BTU Gas Company, Inc. OQ program includes provisions for evaluating an Individual's qualifications if the circumstances warrant.

4.5.1. Reasonable Cause to Verify Qualification (192.805 d)

BTU Gas Company, Inc. will evaluate or require the evaluation an individual if there is reason to believe that the individual is no longer qualified to perform a Covered Task. Concerns regarding an individual's ability to perform a Covered Task may be prompted by a number of circumstances and reported to BTU Gas Company, Inc. by any person.

Possible reasons to verify an Individual's qualification(s) include but are not limited to:

- Loss of motor skills, vision, impairment, etc;
- Observation while performing work assignments;
- Statement from the individual;
- Prolonged period of non-performance of the Covered Tasks; and
- Complaints Received.
- Absenteeism

4.5.2. Performance Contributing to an Incident (192.805 e)

If there is reason to believe that an individual's performance of a Covered Task contributed to an incident, as defined in 49 CFR Part 191 and/or reporting requirements of the Kentucky Public Service Commission, BTU Gas Company, Inc. will initiate an evaluation of that individual's qualification to perform that Covered Task. (see **Appendix E** for more details about reportable incidents) A list of reportable incidents and actions taken after the effective date of this OQ Program will be maintained in **Appendix F**.

4.5.3. Review Process

- A review will be initiated to determine if reasonable cause exists to evaluate an individual's qualification to perform the Covered Task(s) in question.

- If there is reason to believe that an individual is no longer qualified to perform a Covered Task, that individual's performance of the Covered Task will be evaluated.

- The individual shall not perform the Covered Task(s) unsupervised until the evaluation is completed and any necessary re-qualification(s) steps have been completed

- BTU Gas Company, Inc. will evaluate the individual in accordance with this OQ Program.

4.6. Management of Change (192.805 f)

BTU Gas Company, Inc. will communicate changes that affect the performance of a Covered Task to the individuals who perform that Covered Task. A change may be significant enough to require changes to the qualification process or additional evaluations. **Appendix G** contains an on-going list of changes that required communication to qualified individuals after the effective date of this OQ Program.

These changes may include but are not limited to:

- modifications to BTU Gas Company, Inc. policies or procedures;
- changes in state or federal regulations;
- Use of new equipment and/or technology that affects Covered Tasks; and
- New information from equipment or product manufacturers that affects Covered Tasks.

4.7 Training: Knowledge, Skill and Abilities (192.805 h)

BTU Gas Company, Inc. ensures that training is administered for each individual performing Covered Tasks. Appropriate training will be administered to ensure the safe operation of BTU Gas Company, Inc.'s pipeline facilities. BTU Gas Company, Inc. ensures training includes the knowledge, skills and abilities to safely perform the Covered Task(s).

Training for Operator Qualification requirements

Examples requiring training include but are not limited to:

1. New hires (On-the-Job Training (OJT) and classroom)
2. Individuals taking on new Covered Task(s) (New position or Expanded responsibilities)
3. Individuals who fail one or more qualification evaluations

4.8 Modification to Operator Qualification Plan (192.805 i)

BTU Gas Company, Inc. will notify the State Commission of significant modification to their Operator Qualification program.

When a modification to the program is determined to be significant BTU Gas Company, Inc. will complete a Notification of Change form **(Exhibit B)** outlining the modification.

5. RECORD KEEPING (192.807)

BTU Gas Company, Inc. will ensure records demonstrating an individual's qualification to perform various Covered Tasks are maintained using one or more of the following:

- Electronic qualification results;
- Hard copy of qualification results; and/or
- Other appropriate methods.

Qualification records will include the following information:

- Identification of qualified individuals;
- Identification of the evaluator
- Identification of the covered tasks the individual is qualified to perform;
- Dates of qualifications; and
- Qualification methods used.

Records supporting an individual's current qualification will be maintained while the individual is performing the Covered Task. Records of prior qualification and records of individuals no longer performing covered tasks will be retained for a period of five years. Records will be maintained in the office of Pam Williams at HC 60 Lakeville Road, Salyersville, KY 41465.

6. CONTRACTORS

BTU Gas Company, Inc. utilizes contractor personnel to perform some operations and maintenance tasks. Contractor personnel performing covered tasks will be qualified to perform respective covered tasks or a qualified individual as stated in Section 4.4 must be present during performance of the covered tasks.

Contractors are required to obtain their own employee qualifications and provide BTU Gas Company, Inc. with records as outlined in **Section 5, Record Keeping**, above to demonstrate the qualification of their employees to perform respective covered tasks when necessary for the work assignments they accept.

7. APPENDICES

Appendix A: Final Rule and Preamble of 49 CFR part 192

Appendix B: OQ Program Changes

Appendix C: Covered Task List and Covered Task Evaluation Forms

Appendix D: Evaluation Resources Recognized By BTU Gas Company, Inc.

Appendix E: Cross reference of Task List

Appendix F: Reportable Incidents and Actions Taken, If Necessary

Appendix G: Management of Change List

Appendix A

Final Rule and Preamble

For

Operator Qualification:

"Pipeline Safety: Qualification of Pipeline Personnel"

(49 CFR Subparts 192.801 through 192.809)

Issued By The

Office of Pipeline Safety
Research and Special Programs Administration
Department of Transportation

On

August 27, 1999

As amended in the Federal Register on Thursday March 3, 2005

Subpart N—Qualification of Pipeline Personnel

§ 192.801 Scope.

(a) This subpart prescribes the minimum requirements of operator qualification of individuals performing covered tasks on a pipeline facility.
(b) For the purpose of this subpart, a covered task is an activity, identified by the operator, that:

(1) Is performed on a pipeline facility;
(2) Is an operations or maintenance task;
(3) Is performed as a requirement of this part; and
(4) Affects the operation or integrity of the pipeline.

§ 192.803 Definitions.

Abnormal operating condition means a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may:

(a) Indicate a condition exceeding design limits; or
(b) Result in a hazard(s) to persons, property, or the environment.

Evaluation means a process established and documented by the operator, to determine an individual's ability to perform a covered task by any of the following:

(b) Written examination;
(c) Oral examination;
(d) Work performance history review;
(e) Observation during:
(1) Performance on the job. (can not be the sole method of evaluation)
(2) On the job training.
(3) Simulations; or
(f) Other forms of assessment.

Qualified means that an individual has been evaluated and can:

(1) Perform assigned covered tasks; and
(2) Recognize and react to abnormal operating conditions.

§ 192.805 Qualification Program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) Identify covered tasks;

(b) Ensure through evaluation that individuals performing covered tasks are qualified;

(c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;

(d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in part 191 of this chapter;

(e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task;

(f) Communicate changes that affect covered tasks to individuals performing those tasks.

(g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications are needed;

(h) After December 16, 2004, provide training as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of the pipeline facilities; and

(i) After December 16, 2004, notify the Administrator or State agency participating under 49 U.S.C. Charter 601 if the operator significantly modifies the program after the Administrator or State agency has verified that it complies with this section.

§ 192.807 Record keeping.

Each operator shall maintain records that demonstrate compliance with this subpart.

(a) Qualification records shall include:
(1) Identification of qualified individual(s);

(2) Identification of the covered tasks the individual is qualified to perform;

(3) Date(s) of current qualification;

(4) Qualification method(s).

(b) Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

§ 192.809 General.

(a) Operators must have a written qualification program by April 27, 2001. The program must be available for review by the Administrator or by a state agency participating under 49 U.S.C. 601 if the program is under the authority of the state agency.

(b) Operators must complete the qualification of individuals performing covered tasks by October
28, 2002.

(c) Work performance history review may be used as a sole evaluation method for individuals who were performing covered task prior to October 26, 1999.

(d) After October 28, 2002, work performance history may not be used as the sole evaluation method.

(e) After December 16, 2004, observation of on-the-job performance may not be used as the sole method of evaluation.

Appendix B

Operator Qualification Program Changes
For
BTU Gas Company, Inc.

Date	Affected OQ Program Section	Description of Change and Purpose
2/1/2010	Plan	Operator Qualification plan written

Appendix C

List of Covered Tasks

Task Number	Covered Task	Subsequent Qualification Period
F-1	Join plastic pipe with heat fusion	1 year
F-2	Join plastic pipe with mechanical coupling	1 year
H-1	Install Meter & Regulator Set	3 year
H-2	Install Domestic Service Lines	3 year
I-1a	Monitor Atmospheric Control	3 year
L-1	Tap pipelines under pressure	3 year
L-2	Purge Pipelines	3 year
L-3	Monitoring Odorization	3 year
M-1	Perform patrol and leakage surveys	3 year
M-2	Locate and Mark underground facilities	3 year
M-3	Test Pipelines	3 year
M-4	Inspect Regulators	3 year
M-5a	Inspect Emergency Valves	3 year
M-7	Prevent Accidental Ignition	3 year
M-8	Make Permanent Field Repairs on Natural Gas Pipelines	3 year
M-10	Abandon / Deactivate	3 years

Appendix D

Evaluation Resources Recognized By BTU Gas Company, Inc.

Resource Name	Covered Task	Resource Description
Kentucky Gas Association	All Task	KGA Workshops / ITS Curriculum
R. L. Wingate & Associates	All Task	On site / ITS curriculum

Appendix E

Guidelines for Reportable Incidents

NOTE: All information applies when determining if an incident is reportable to the Kentucky Public Service Commission.

Only **BOLDED** information is used to determine if the incident is reportable to the Department of Transportation

Reportable Incident – An event that involves a release of gas from a pipeline or liquefied natural gas (LNG) or natural gas from an LNG facility; and one or more of the following:

1) **A death or personal injury necessitating in-patient hospitalization; and/or**

2) **Estimated property damage, including cost of gas lost, of the operator or others, or both, of:**
   - ♦ $25,000 or more – Kentucky Public Service Commission
   - ♦ **$50,000 or more – U. S. Department of Transportation (DOT)**; and/or

3) **An event that results in an emergency shutdown of an LNG facility; and/or**

4) **An event that is significant, in the judgment of the Operator, even though it does not meet the criteria set forth in (1) through (3) above.** A significant event shall include, but not be limited to the following:
   - ♦ An evacuation of any premises;
   - ♦ A fire or explosion;
   - ♦ Instances in which there is media coverage; and
   - ♦ Occurrences in which there is an interruption in services to more than one hundred (100) customers.

Appendix F

Reportable Incidents and Actions Taken, If Necessary

Date _____

OQ Program Reference _____

_____

Incident Description _____

_____

_____

_____

_____

Investigated By _____

Was Incident Due to Performance of Individual (Y/N)_____

Name of Individual _____

Performance Related (Y/N)_____

Qualification Related (Y/N)_____

Re-evaluation Required (Y/N)_____

Remarks _____

_____

_____

_____

_____

Appendix G

Management of Change List

Date	Description of Change	Description of Communication

Gas pipeline River Crossings for BTU Gas:

All river crossings for gas pipeline in the BTU gas system are bored beneath the river. These gas crossings are checked once a month when the gathering system is patrolled.

The listing of the river crossings for the BTU system is as follows:

This sheet is to be completed and kept with the monthly documentation of the patrolling of the gathering system.

1. Lakeville Bridge _____
2. Behind High School _____
3. Behind Dixie _____
4. Route 30 _____

VALVES:

Valves are in different places in and along the main pipelines. They have been checked to make sure they still perform and do what they are supposed to do. They were all in good working order.

Signed: _____

Dated: _____

1. 2 cut off valves behind the High School at the river crossing
2. 1 at Auxier Branch in Dixie
3. 1 at radio station
4. 1 at mouth of Rt. 30 River crossing
5. 1 at 2019
6. 2 at North Magoffin School on 460
7. 1 at Elk Creek
8. 1 at 3334
9. 3 on Lick Creek
10. 1 on Coon Creek
11. 1 on top Mine Fork Hill
12. 2 on Oakley

RELIEF VALVES AND REGULATORS:

All relief valves and regulators located on the meter run at the wells along the main pipelines. They have been checked and are all in good working order. No problems were found around these valves nor around the area they are located in.

Signed: _____

Dated: _____

1. Rt. 7 _____
2. Lakeville Road _____
3. Rt. 40 _____

**BTU does not have wells of its own. We buy gas from other parties. All wells going into our system have relief valves and regulators on them. They are set at 60 pound pressure.

CORROSION:

All BTU Gas system is plastic pipe and is underground. BTU gas does not own any wells we buy our gas from other entities. Any wells going into the system would be taken care of by the provider.

BTU Gas has three locations that has pipeline that is exposed to atmospheric corrosion, these locations are inspected each month. At the last inspection they were found to be free of atmospheric corrosion. The following is a listing of the locations.

This report is to be completed once every three years and kept with the patrolling of gathering system report.

1. Route 7 _____
2. Lakeville _____
3. Route 40 _____

BTU GAS COMPANY, INC.
"Sniff Test" and /or "Odorometer Test"

Location: Hoskins Drip
Date: 12-10-09 Time: 10:00

ODOR LEVEL
____ Nil
____ Barely Detectable
_V_ Readily Detectable
____ Strong

List other odors present: _____

Observed by: DJ

Location: Rt. 33.34 Gauge
Date: 12-10-09 Time: 1:30

ODOR LEVEL:
____ Nil
____ Barely Detectable
_V_ Readily Detectable
____ Strong

List other odors present: _____

Observed by: L P

Location: LaRoville Gauge
Date: 12-10-09 Time: 4:00

ODOR LEVEL:
____ Nil
____ Barely Detectable
_V_ Readily Detectable
____ Strong

List other odors present: _____

Observed by: DJ

BTU GAS COMPANY, INC.
PATROLLING OF GATHERING SYSTEM

Period Covered: Began: 12-28-09 Ended 12-30-09
Areas Covered: Elk Creek, Lick Creek, Coon Creek, Lakeville, Royalton

Map References: _____

Leakage Indications Discovered (describe locations and indications, such as condition of vegetation) No leak

Leakage Indications Reported to: To the main office
Construction activity along areas: _____

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: _____

Follow up repairs, maintenance or tests resulting from this inspection:

Comments: _____

Number of people in patrol party: _____

Signature of person in charge of patrol party: _____
Date: 12-30-09

BTU GAS COMPANY, INC.
PATROLLING OF GATHERING SYSTEM

Period Covered: Began: 11-25-09 Ended 11-27-09
Areas Covered: Elk Creek, Lick Creek, Coon Creek, Lakeville, Royalton

Map References: _____

Leakage Indications Discovered (describe locations and indications, such as condition of vegetation) No leak

Leakage Indications Reported to: To the main office
Construction activity along areas: _____

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: _____

Follow up repairs, maintenance or tests resulting from this inspection:

Comments: _____

Number of people in patrol party: _____

Signature of person in charge of patrol party: _____
Date: 11-30-09

BTU GAS COMPANY, INC.
PATROLLING OF GATHERING SYSTEM

Period Covered: Began: 10-28-09 Ended 10-30-09
Areas Covered: Elk Creek, Lick Creek, Coon Creek, Lakeville, Royalton

Map References: _____

Leakage Indications Discovered (describe locations and indications, such as condition of vegetation) No leak

Leakage Indications Reported to: To the main office
Construction activity along areas: _____

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: _____

Follow up repairs, maintenance or tests resulting from this inspection:

Comments: _____

Number of people in patrol party: _____

Signature of person in charge of patrol party: _____
Date: 10-30-09

BTU GAS COMPANY, INC.
PATROLLING OF GATHERING SYSTEM

Period Covered: Began: 9-28-09 Ended 9-30-09
Areas Covered: Elk Creek, Lick Creek, Coon Creek, Lakeville, Royalton

Map References: _____

Leakage Indications Discovered (describe locations and indications, such as condition of vegetation) No leak

Leakage Indications Reported to: To the main office
Construction activity along areas: _____

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: _____

Follow up repairs, maintenance or tests resulting from this inspection:

Comments: _____

Number of people in patrol party: _____

Signature of person in charge of patrol party: _____
Date: 9-30-09

BTU GAS COMPANY, INC.
PATROLLING OF GATHERING SYSTEM

Period Covered: Began: 8-26-09 Ended 8-30-09
Areas Covered: Elk Creek, Lick Creek, Coon Creek, Lakeville, Royalton

Map References: _____

Leakage Indications Discovered (describe locations and indications, such as condition of vegetation) No leak

Leakage Indications Reported to: To the main office
Construction activity along areas: _____

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: _____

Follow up repairs, maintenance or tests resulting from this inspection:

Comments: _____

Number of people in patrol party: _____

Signature of person in charge of patrol party:
Date: 8-30-09

BTU GAS COMPANY, INC.
PATROLLING OF GATHERING SYSTEM

Period Covered: Began: 7-28-09 Ended 7-30-09
Areas Covered: Elk Creek, Lick Creek, Coon Creek, Lakeville, Royalton

Map References: _____

Leakage Indications Discovered (describe locations and indications, such as condition of vegetation) No leak

Leakage Indications Reported to: To the main office
Construction activity along areas: _____

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: _____

Follow up repairs, maintenance or tests resulting from this inspection:

Comments: _____

Number of people in patrol party: _____

Signature of person in charge of patrol party:
Date: 7-30-09