

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

DELTA NATURAL GAS COMPANY, INC.)	
)	
_____)	CASE NO.
)	90-109
ALLEGED FAILURE TO COMPLY WITH)	
COMMISSION REGULATION 807 KAR 5:022)	

ORDER TO SHOW CAUSE

Delta Natural Gas Company, Inc. ("Delta"), which engages in the distribution, sale, and furnishing of natural gas to the public for compensation for heat, power, and other purposes, is a utility under the jurisdiction of the Commission.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by a utility. Pursuant to this statutory directive, the Commission promulgated Commission Regulation 807 KAR 5:022, Section 13, which requires each natural gas utility to establish a written operation and maintenance plan, and Commission Regulation 807 KAR 5:022, Section 1(7)(c), which requires each natural gas utility to follow its operation and maintenance plan. The Commission also promulgated Commission Regulation 807 KAR 5:022, Section 6(8), which specifies who may make a plastic pipe joint.

Commission Staff has submitted to the Commission an Incident Report dated January 22, 1990, attached hereto as Appendix A, which alleges that:

1. On November 14, 1989, highway construction workers damaged a four-inch plastic natural gas pipeline located on Highway 25 in London, Kentucky. Delta owns and operates this pipeline.

2. On November 16, 1989, two employees of Stanley Pipeline Company, Delta's pipeline contractor, made permanent repairs to the damaged section of that pipeline. They removed the damaged section of pipeline and joined a new section of plastic pipe by heat fusion in place. Neither employee was qualified to join plastic pipe.

3. On November 17, 1989, a leak was discovered in the pipeline section joined the previous day.

4. Delta employees went to the site of the leak and attempted to make repairs. They did not ground the pipes and tools used in their repair effort. As they attempted to install an encirclement leak repair clamp, the natural gas ignited.

5. After the escaping natural gas and fire were brought under control, permanent repairs were again made on the plastic pipeline on November 17, 1989 by Stanley Pipeline Company employees who were not qualified to join plastic pipeline.

6. Delta's operation and maintenance plan, Standard Practice No. 0-6.1(6)(C), requires Delta personnel to properly ground all tools and equipment used in the repair, replacement, or extension of plastic pipe.

7. Delta violated Commission Regulation 807 KAR 5:022, Section 6(8), on November 16 and 17, 1989, by failing to use

qualified persons to make plastic pipe joints on its natural gas pipeline.

8. Delta violated Commission Regulation 807 KAR 5:022, Section 1(7)(c) on November 17, 1989, by failing to follow the procedures set forth in its operations and maintenance plan for the repair of plastic pipe.

WHEREFORE, the Commission, on its own motion, HEREBY ORDERS that:

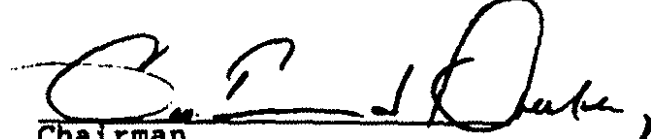
1. Delta shall submit to the Commission a written response to the allegations contained in the Incident Report within 20 days of the date of this Order.

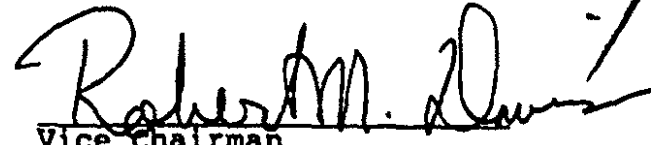
2. Delta shall appear on July 26, 1990 at 10:00 a.m., Eastern Daylight Time, in Hearing Room No. 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence concerning the incident which is the subject of the Incident Report, more specifically the alleged violations of Commission Regulation 807 KAR 5:022, Sections 1(7)(c) and 6(8), and to show cause why it should not be subject to the penalties of KRS 278.992 for its alleged violations of Commission Regulation 807 KAR 5:022.


3. The Incident Report, attached hereto as Appendix A, is hereby made a part of the record of this case.

Done at Frankfort, Kentucky, this 8th day of May, 1990.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:


Executive Director

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION

INCIDENT REPORT

Delta Natural Gas Co., Inc.
London, Kentucky

January 22, 1990

BRIEF

On November 17, 1989 at 6:07 a.m., natural gas ignited while Delta Natural Gas Co., Inc. (Delta) employees were attempting to install a repair clamp on a four-inch plastic line. The location of the leak was North Main Street near Chinook Drive in London, Kentucky. Three Delta employees, Stanley Altizer, David Phipps, and Curtis Chestnut, received minor burns from the fire.

INVESTIGATION

Gas Pipeline Safety Branch Manager Scott Smith and I arrived at Delta's London office on Friday, November 17, 1989 to begin our investigation. Persons contacted during the course of this investigation included:

Gerald Baker - Division Manager, South

Jim Potter - Safety and Training Director

Butch Snowden - Construction Manager

Alan Heath - Vice President, Operations & Engineering

Stanley Altizer - Delta Lead Customer Service Representative

Jim Helm - Deputy State Fire Marshal

Wilson Rawlings - London Fire Chief

Ernest Clark - Asst. London Fire Chief

David Phipps - Senior Customer Service Representative

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On November 22, I again met with Gerald Baker and David Phipps at Delta's Corbin office to interview Mr. Phipps concerning the incident. The following is an account of the circumstances leading up to and including the fire as told by Stanley Altizer, David Phipps and Benny Hensley.

On Tuesday, November 14, 1989, a four-inch plastic main on Highway 25 just north of McDonalds Restaurant, operating at 20 psig (chart attached), was damaged by Elmo Greer and Sons, highway contractors working in the area. A full circle leak clamp was installed by Delta to stop the flow of gas until permanent repairs could be made. The permanent repair was made by Stanley Pipeline Company (Stanley) of Winchester, a pipeline contractor for Delta, on Thursday, November 16, 1989. According to Mr. Hensley, the Stanley employees who made the welds on the repaired line were Bruce Widner and David McCracken. Mr. Hensley stated that these men had not been certified to join plastic pipe. Mr. Hensley did observe these men make the tie-in weld on the repaired line and saw no problem with it. After the repair was complete, the ditch was left partially filled so the highway contractor could finish his work.

On Friday, November 17, 1989 at 4:58 a.m., Mr. Altizer heard a report on his scanner radio by the Laurel emergency response about a gas leak. A McDonalds restaurant employee called the Laurel dispatch office about a natural gas leak near the McDonalds Restaurant, and Laurel dispatch notified Delta and the fire

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department (copy of fire run attached). Mr. Altizer called Mr. Phipps and Mr. Chestnut to help him find and repair the leak.

While the Delta crew was on its way to the leak, the fire department blocked off a section of North Main Street to traffic around the leak. A diesel backhoe was used to remove most of the dirt and gravel from around the pipe. The backhoe was left running on the north end of the ditch while Mr. Phipps and Mr. Chestnut uncovered approximately 4' or 5' of the four-inch line with shovels. The gas was leaking from an approximate one-half inch gap in the pipeline at the tie-in weld made by Stanley on November 16, 1989. Since this main has a two-way feed, two shut-off tools would be needed to shut the gas off in this section without interrupting service to the customers in the area. One of the shut-off tools was found to be inoperable. The Delta crew then decided to put a Mueller "4x9 Full Seal" encirclement leak repair clamp on under pressure. Mr. Phipps stated that he looked for a grounding strap for the repair clamp, but was unable to find all the needed parts. According to Mr. Phipps, no other attempt was made to ground the pipe, tools, or clamp. Mr. Phipps and Mr. Chestnut put the clamp around the pipe while Mr. Altizer held a nonsparking flashlight for them. Mr. Phipps slid the clamp down the pipe over the leaking weld and had started to tighten the bolts in the clamp when the gas ignited. This was approximately 6:07 a.m. (sketch of accident site and photos attached).

After the escaping gas and fire were brought under control, permanent repairs were made on the damaged line by Stanley's noncertified employees, and service was restored to the 63 customers who had been without gas.

The temperature at the time of the incident was approximately 20°F with the wind from the northwest at about 10 mph. Soil conditions before the fire were damp.

FINDINGS

1. Delta failed to follow Section No. 0-61(1)(d) of its Operating and Maintenance (O&M) Plan by using unqualified workers to join plastic pipe on its system which is in violation of 807 KAR 5:022, Section 1(7)(c).

2. Delta failed to use qualified personnel to join the section of plastic pipe that failed which is in violation of 807 KAR 5:022, Section 6(8)(a)1 and 2.

3. Delta failed to follow Section No. 0-61(6)(c) of its O&M Plan by not grounding the pipe and tools which is in violation of 807 KAR 5:022, Section 1(7)(c).

RECOMMENDATIONS

It is recommended that Delta:

1. Provide a plan to assure this Commission that all persons, either company or contractor, who are to be used for joining plastic pipe prior to performing joining be qualified.

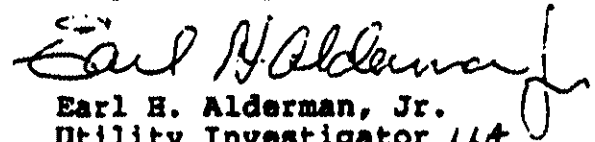
2. Provide this Commission with a list of all plastic pipe fusion or mechanical joinings made by Stanley's nonqualified employees, for possible reinspection.

3. Hold meetings with all affected personnel to reiterate the importance of complying with Section 0-61(6)(c) of its O&M Procedure.

4. Inventory all response vehicles to assure this Commission that said vehicles be provided with necessary equipment to adequately ground piping when necessary.

5. It is recommended that the Commission consider action against the utility in accordance with KRS 278.992.

Respectfully submitted,


Earl H. Alderman, Jr.
Utility Investigator *UA*
edd.

EHA/ml1

Attachments



Hwy. 25

Chinook Drive
Regulator Station

Chinook Drive

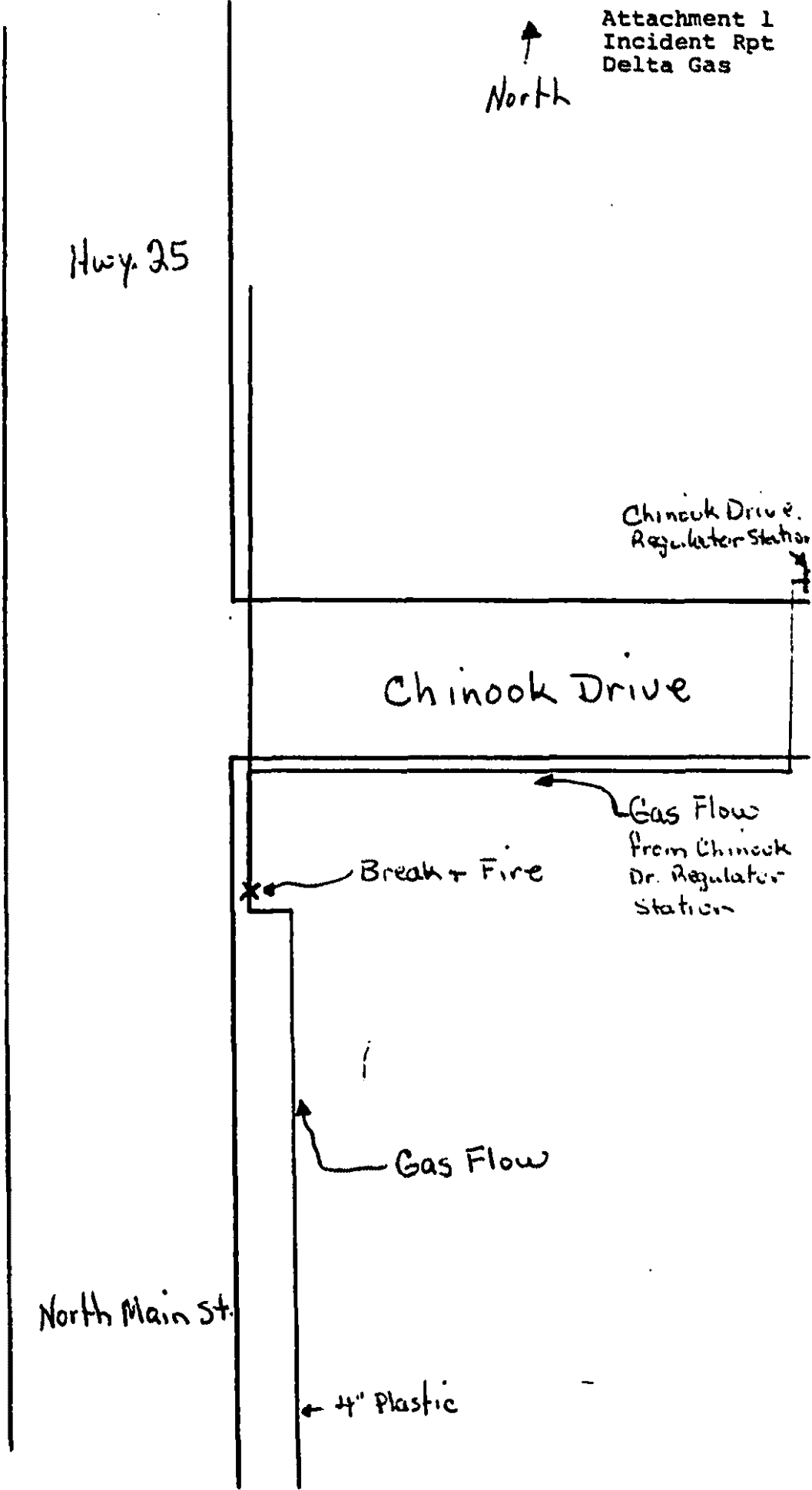
* Break + Fire

Gas Flow
From Chinook
Dr. Regulator
Station

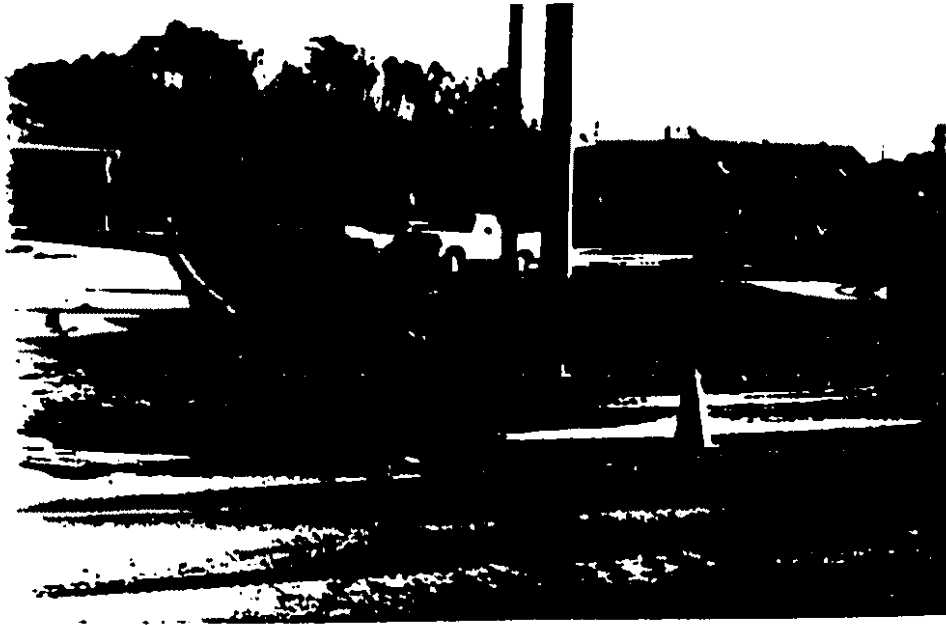
Gas Flow

North Main St.

4" Plastic



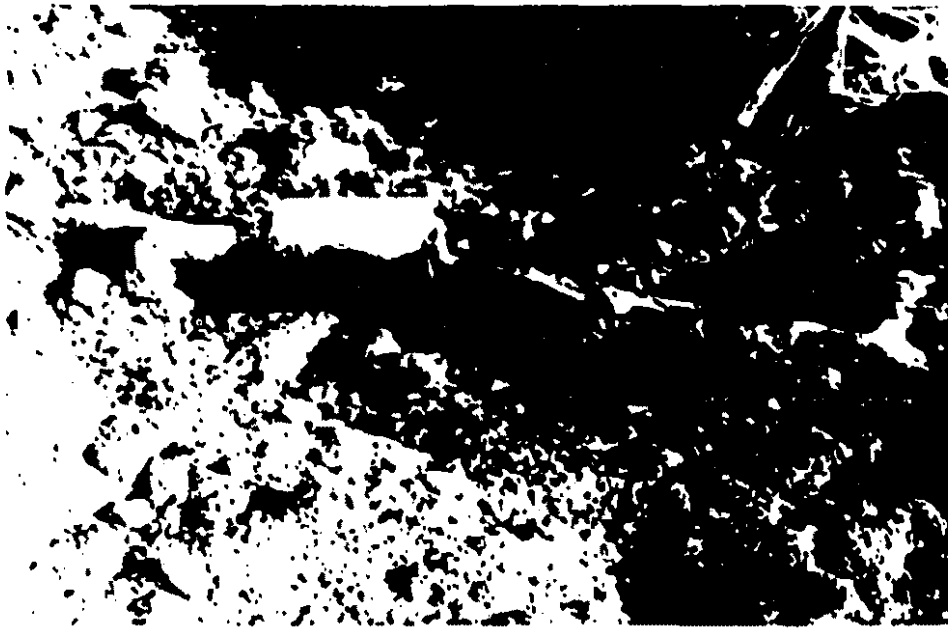
Delta Gas



Views of
Incident Area



100
100
100
Delta 100



View of 4" pipe
& repair clamp
before being
removed from
ditch

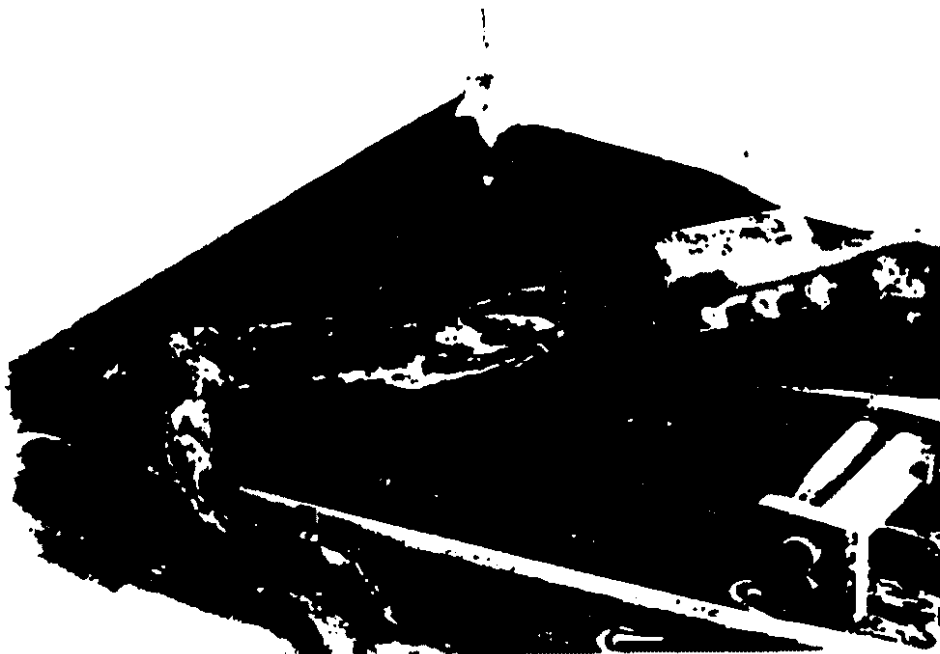


View of 4" pipe
& repair clamp
before being
removed from
the ditch

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4" plastic pipe
joint that
failed



View of
burned pipe