

NOTICE OF AMENDMENT

CERTIFIED - RETURN RECEIPT REQUESTED

September 22, 1997

Mr. Dave Sinclair
Vice President of Operations
Enstar/Alaska Pipeline Company
P.O. Box 190288
Anchorage, Alaska 99519-0288

CPF No. 57006M

Dear Mr. Sinclair:

On June 10, 11, 12, and 18, 1997, a representative of the Western Region, Office of Pipeline Safety, pursuant to Chapter 601 of 49 United States Code, conducted an on-site pipeline safety inspection of Enstar records at your office in Anchorage, Alaska and your pipeline facilities between the Kalifonsky Compressor Station near the town of Kenai, Alaska and the City of Anchorage.

As a result of the inspection, it appears that ENSTAR has committed probable violations, as noted below, of pipeline safety regulations, Title 49, Code of Federal Regulations, Part 192. The items inspected and the probable violations are:

1. **§192.615(a)(6) requires each operator to establish written procedures to minimize the hazard resulting from a gas pipeline emergency. These procedures must include emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life and property.**

Enstar has incorrectly identified the key valves needed to isolate regulator station A-205 - ML&P Power #1 in their *Transmission System Startup/Shutdown Procedures*. Valves A1232-T3 & T4 are buried valves that are not accessible in a timely manner. In addition, each transmission line valve that may be required during an emergency must be annually

inspected in accordance with §192.745. These buried valves have not been inspected accordingly. It is our understanding that three valves, A1232-T1 and the main inlet valves for regulator stations A-402 and A-432, would be required to isolate regulator station A-205. The emergency shutdown procedures must be revised to identify the correct isolation valves. These valves must be annually inspected in accordance with §192.745.

2. **§ 192.199(h) requires operators to ensure that each pressure relief or limiting device, except for a valve that will isolate the system under protection from its source of pressure, be designed to prevent unauthorized operation of any stop valve that will make the pressure relief valve or pressure limiting device inoperative.**

Enstar regulator station security design or procedures did not prevent unauthorized operation during repair of the Rabbit Creek/Elmore regulator station (A-407) in late-May, 1997. Our representative noted in preparation of anticipated pipeline modifications, Enstar removed the station's security fencing, gates, and locks from May 12 until early-June 1997. This regulator station is immediately adjacent to a school bus stop. Temporary road barricades were placed around the station grounds, but the station piping was still easily accessible. The unlocked, high pressure by-pass and relief device valves had their handles removed, but all regulator sensing line valve handles were still present. Enstar management, upon notification by our representative on May 29, 1997, did promptly lock the bypass valve and remove the regulator sensing line takeoff valves. Enstar must modify its operation and maintenance procedures, *S.O.P. 1210-Security Practices for Valves, Regulators Stations, and Metering Stations*, to prevent unauthorized operation at all times, particularly during repair operations.

In addition to the probable violations listed above, our inspection revealed some areas that are cause for concern. I hope that you will consider the following concerns as constructive relating to continued pipeline safety.

- The ML&P #1 regulator station (A-205) was constructed in 1961 and is immediately adjacent to a railroad spur. Unmodified, pre-code regulator stations are not required to have a single isolation valve on its inlet piping as is required on post-code regulator stations per §192.181(b). Nevertheless, we are concerned that it would take closure of a minimum of three valves to shutdown the ML&P regulator station should it be severely damaged. In addition, complete shut-in of these valves would limit natural gas service to much of downtown Anchorage. We recommend investigating a more expedient method of isolating this line section that may not impact such a large service area.

- Enstar has conducted numerous close interval surveys (CIS) of various transmission pipelines throughout the Anchorage area in 1995 and 1996 in order to ensure that adequate cathodic protection (CP) exists on its pipeline system. The results of one of the CIS was validated during investigation of an area exhibiting low CP. Exposure of the line in this area indicated corrosion pitting on the Tudor line approximately 4500 feet west of the Muldoon Loop line. Enstar repaired the corroded segment. We commend and encourage the continued use of these surveys, but are concerned that Enstar has not explicitly addressed these studies in their Corrosion Control Policy nor have they clarified that CIS readings must meet the same criteria as those taken at permanent test stations.

In regard to violation items numbered 1 and 2, relating to your written procedures for operations, maintenance, and emergencies, the Office of Pipeline Safety is issuing to you a Notice of Amendment requiring that your procedures be amended to comply with the requirements of the regulations referenced. As provided in 49 C.F.R. §190.237, this notice serves as your notification that this office considers your procedures/plans inadequate. Under 49 C.F.R. § 190.237, you have a right to submit written comments or request an informal hearing. You must submit written comments or a request for a hearing within 30 days after receipt of this notice. After reviewing the record, the Associate Administrator for Pipeline Safety will determine whether your plans or procedures are adequate. The criteria used in making this determination are outlined in 49 C.F.R. § 190.237. If you do not wish to contest this notice, please provide your revised procedures within 30 days of receipt of this notice.

page 4

When appropriate procedures have been prepared, submit them to the Director, Western Region, Office of Pipeline Safety, Research and Special Programs Administration, 12600 W. Colfax Avenue, Suite A-250, Lakewood, Colorado 80215. Please refer to **CPF No. 57006M** in any correspondence on this matter.

Sincerely,

Edward J. Ondak
Director

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UNITED STATES DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
OFFICE OF PIPELINE SAFETY
GAS PIPELINE SAFETY VIOLATION REPORT

1. Inspector Name Christopher Hoidal	2. Date of Inspection 6/10-12/97 and 6/18/97	3. CPF#	5	7	0	0	6
4. Pipeline Operator/Owner ENSTAR Natural Gas Company/Alaska Pipeline Company							
5. Headquarters Address 401 E. International Airport Road P.O. Box 1902088 Anchorage, AK 99519-0288				6. Telephone No. 907-277-5551			
7. Inspection Location Anchorage, AK and Kenai, AK				7a. Inspection Unit No. <u>1</u> of <u>1</u>			
8. Portion of System Inspected (Describe location & facility) Kenai Transmission Line - sixty-five miles of onshore, dual 12/16" lines from Kalifonsky Compressor Station (near Kenai) to Potter Gate in Anchorage. Twenty-eight miles of a single 4"/6"/8" North Kenai Lateral (Royalty Line) to Nikiski is included. Exact mileage under Turnagain Arm unknown (Est 10 miles). High pressure gas transmission mains between Anchorage Gate and Potter Gate. Regulator stations included.							
<u>Nature and Size of System</u>							
9a. Type of Operator				9b. Type of Pipe in System			
<input type="checkbox"/> LNG (Interstate)				<input type="checkbox"/> Cast Iron			
<input type="checkbox"/> LNG (Intrastate)				<input checked="" type="checkbox"/> Steel			
<input type="checkbox"/> LPG				<input type="checkbox"/> Plastic			
<input type="checkbox"/> Master Meter				<input type="checkbox"/> Other			
<input type="checkbox"/> Other Distribution							
<input type="checkbox"/> Gathering							
<input type="checkbox"/> Transmission (Interstate)				9c. Size of Operator (No. of Miles/Customers)			
<input checked="" type="checkbox"/> Transmission (Intrastate)				Capacity +\- <u>100 miles</u>			

10. Nature of Probable Violations (Check as many as applicable)

- 1. Problem in Design/Materials
- 2. Problem in Construction or Siting
- 3. Welding or Joining
- 4. Problem in LNG Equipment
- 5. Test Requirements or MAOP Qualification
- 6. Corrosion Control
- 7. Other Maintenance/Monitoring
- 8. Pressure Control
- 9. Personnel Qualifications and Training
- 10. Fire Protection
- 11. Security
- 12. Anti drug Program
- 13. Other Operations
- 14. Reporting Requirements
- 15. Other
- 16. Inadequate Procedures
 - A. Construction
 - B. Corrosion Control
 - C. Operations
 - D. Training
 - E. Maintenance

Violation No. 1

11a. CFR § Violated: 192.615

11b. **Summarize what the regulation requires that operator did not do:**

§192.615(a)(6) requires each operator to establish written procedures to minimize the hazard resulting from a gas pipeline emergency. These procedures must include emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life and property.

12. Provide detailed information about violation:

Enstar has incorrectly identified the key valves needed to isolate regulator station A-205 - ML&P Power #1 in their *Transmission System Startup/Shutdown Procedures*. Valves A1232-T3 & T4 are buried valves that are not accessible in a timely manner. In addition, each transmission line valve that may be required during an emergency must be annually inspected in accordance with §192.745. These buried valves have not been inspected accordingly. It is our understanding that three valves, A1232-T1 and the main inlet valves for regulator stations A-402 and A-432, would be required to isolate regulator station A-205. The emergency shutdown procedures must be revised to identify the correct isolation valves. These valves must be annually inspected in accordance with §192.745.

13. Public and/or environmental concerns in area of violation:

ENSTAR provides the only natural gas source for the cities of Anchorage, Kenai, and Nikiski. Pipelines cross very sensitive wildlife refuge areas, with limited access, so many people use the right-of-way as a means of access.

14a. Persons Interviewed: John J. Lau **Title:** Manager Trans. Operations

Drew Smith

Senior Engineer

Mike Stasek

Supvsr. of Trans.Operations

Joe Lepley

Engineering Services Spv

Dan Kendall

Corrosion Technician

Paul Cloninger

Spv of Gas Measurement

Bob Funk

Supvsr. of Trans.Operations

14b. Comments of people interviewed: Very knowledgeable. A few are a little indignant about being inspected.

Violation No. 2

11a. CFR § Violated: §192.199(h) _____

11b. Summarize what the regulation requires that operator did not do:

§ 192.199(h) requires operators to ensure that each pressure relief or limiting device, except for a valve that will isolate the system under protection from its source of pressure, be designed to prevent unauthorized operation of any stop valve that will make the pressure relief valve or pressure limiting device inoperative.

12. Provide detailed information about the violation: Enstar regulator station security design or procedures did not prevent unauthorized operation during repair of the Rabbit Creek/Elmore regulator station (A-407) in late-May, 1997. Our representative noted in preparation of anticipated pipeline modifications by Enstar that the station's security fencing, gates, and locks were removed from May 12 until early-June 1997. This regulator station is immediately adjacent to a school bus stop. Temporary road barricades were placed around the station grounds, but the station piping was still easily accessible. The unlocked, high pressure by-pass and relief device valves had their handles removed, but all regulator sensing line valve handles were still present. Enstar management, upon notification by our representative on May 29, 1997, did promptly lock the bypass valve and remove the regulator sensing line takeoff valves. Enstar must modify its operation and maintenance procedures, *S.O.P. 1210 Security Practices for Valves, Regulators Stations, and Metering Stations*, to prevent unauthorized operation at all times, particularly during repair operations.

13. Public and/or environmental concerns in area of violation:

This regulator station reduces natural gas pressure from 685 psi to 60 psi. Accidental over pressurization could be accomplished with the turn of a common crescent wrench and the turning of a takeoff valve.

14a. Persons Interviewed: John J. Lau Title: Manager Trans. Operations

Drew Smith

Senior Engineer

Mike Stasek

Supvsr. of Trans. Operations

Joe Lepley

Engineering Services Spv

Dan Kendall

Corrosion Technician

Paul Cloninger

Spv of Gas Measurement

14b. Comments of people interviewed: Very knowledgeable. A few are a little indignant about being inspected.

15. Supporting Documents/Materials

Item No.	Description (Include date)	Source of Documents	Remarks
1	Station Isolation Valve	ENSTAR	Transmission System Startup and Shutdown Procedures
1	SOP 1401	ENSTAR	References to emergency shutdown procedures
1	Pipeline ROW map	ENSTAR	
2	Photograph of Reg Station A407(5/24/97)	Hoidal/OPS	See attached
2	SOP 1210	Enstar O&M	

16. Inspector's Signature:

Date:

17. Compliance History

Describe Violation/ CPF No.

Date	Place	Noncompliance	Date WL	Outcome
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3/6/96	Kenai, AK	192.707,739,463, 465	56005-m	closed 1/8/97
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18. Gravity of Offense

Minor

19. Degree of Culpability

High

20. Ability to Continue in Business

Excellent

21. Ability to Pay

Excellent

22. Good Faith in Attempting to Achieve Compliance

Medium

23a. Proposed Remedy

- Warning Letter
- Civil Penalty: Recommended Amount \$ _____
- Compliance Order
- Hazardous Facility Order
- Notice of Amendment of O&M Plan

23b. Analysis of Proposed Remedy

Violation's 1 and 2 Issue a Notice of Amendment

24. Regional Director's Signature:

Date:

July 13, 1997

INFORMATION: Comprehensive Inspection
ENSTAR/Alaska Pipeline Company
Kenai Transmission System, UREC 264

Chris Hoidal
Staff Engineer, DPS-28

Edward Ondak
Director, Western Region

COMPANY INSPECTED: ENSTAR Natural Gas Company/
Alaska Pipeline Company

TYPE: Intrastate Gas Transmission

TYPE OF INSPECTION: Standard

LOCATION (DATE): Anchorage, AK (June 10-12, 1997)
Kenai, AK (June 18, 1997)

FACILITIES INSPECTED:

I conducted this inspection at ENSTAR's Headquarters in Anchorage, various regulator stations throughout Anchorage and Kenai, and at the Gudenrath compressor station (MP 25) near Kenai, Alaska. The pipeline system delivers product natural gas from the Kenai Gas fields to the cities of Kenai, Nikiski, and Anchorage. Gas compression is usually provided by Marathon compressors in the Kenai gas fields.

The transmission system primarily consists of a dual, parallel 12 and 16-inch (O.D.), X-46 steel pipe. The first ("A" loop) was constructed in 1961 and the second ("B" loop) was constructed in 1978. The North Kenai Lateral (Royalty line) was constructed between 1976 and 1978 and consists of 8-, 6-, and 4-inch pipe. All pipe is coated and cathodically protected primarily by rectifiers. Approximately ten miles of the pipeline is submerged to traverse Turnagain Arm. The MAOP for the main lines is 1000 p.s.i., and is limited by the components. The MAOP for the lateral is 1000 p.s.i. and 468 p.s.i. Two ENSTAR compressor stations, Kalifonsky(MP 0) and Gudenrath (MP 25), are used only occasionally during periods of peak demand. ENSTAR also operates a distribution system. The transmission unit, however, operates all regulator stations including those that reduce the pressure to the distribution pressure of 60 p.s.i.

I performed field inspections of numerous pipeline components on the main transmission line, the lateral line, both compressor stations, and numerous regulator stations.

PERSONS INTERVIEWED:

John J. Lau, P.E.	Manager Transmission Operations
Drew Smith	Senior Engineer
Mike Stasek/Bob Funk	Transmission Operations Supervisors
Joe Lepley	Engineering Services Supervisor
Dan Kendall	Corrosion Technician
Paul Cloninger	Supervisor of Gas Measurement

DEFICIENCIES FOUND: Isolation valves listed in their emergency shutdown procedures were incorrect for a portion of Downtown Anchorage. Station security was not provided during a prolonged repair during late May, 1997. Other concerns that could not be cited on an explicit regulation were mentioned as a letter of concern. They include what appears to be the need for a station inlet valve on a pre-code regulator station in downtown Anchorage and the need to explicitly ensure that Close Interval Surveys meet the same criteria as their CP readings taken at the permanent test stations.

COMMENTS: Enstar is performing close intervals surveys and considering IR drop. They still need to realize they do not have enough isolation valves on their distribution system.

RECOMMENDATIONS:

1. Recommend issuance of Notice of Amendment items 1 and 2.
2. Letter of concern on Close Interval Surveys and need for a station isolation valve on pre-code regulator station.

ATTACHMENTS:

1. Evaluation Report of an Intrastate Gas Transmission System
2. Violation Report
3. Violation Letter