## WARNING LETTER

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 20, 1999

Mr. John Zurcher Manager - Pipeline Safety Columbia Gas Transmission Company 1700 Maccorkle Ave. SE Charleston, WV 25314

CPF NO. 39110W

Dear Mr. Zurcher,

On February 2 and April 7, 1998, a representative of the Public Utilities Commission of Ohio, acting as an agent for interstate pipelines for the Central Region, Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code, conducted an inspection of your records and pipeline facilities in Sugar Grove, Ohio.

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

## 1) § 192.225 - Welding-General.

- § 192.225(a) requires welding must be performed by a qualified welder in accordance with welding procedures qualified to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify the procedure shall be determined by destructive testing.
- A. Several Columbia Gas Transmission (CGT) welding procedure qualification records state tensile strength data that does not accurately reflect a range of tensile strength as reported in API 5L. The calculated tensile strengths stated in the qualification record are significantly higher than the API 5L referenced values. The following Weld Test Records are examples: GMA-01, GMA-03, GMA-05, 01R002, 03R002, 03R005, 03R10, 03R013, 09R003. A review of the material used in these qualification records should be made to determine where administrative changes in the qualification records may be necessary and to determine if new procedure qualification are required if appropriate materials were not used.
- B. Several CGT welding procedures combine several essential variable groups into one welding procedure. Although this has

been allowed, each possible procedure combination must be qualified prior to combining them into one procedure to account for the various essential variables. CGT Welding Specification No. SMAW-09 does not have a welding test record for Group B materials welded entirely with API 1104 Group 1 electrodes. The procedure is incorrect and requires revision to reflect this omission.

C. The welding procedure GMAW-208 states the procedure is for a branch wall thickness greater than .156" and nominal pipe size of less that 2 3/8". The weld test record for this procedure (GMA-07) states the testing was performed on .156" w.t. pipe. The procedure has not been qualified correctly.

Under 49 United States Code § 60122, you are subject to a civil penalty not to exceed \$25,000 for each violation for each day the violation persists up to a maximum of \$500,000 for any related series of violations. We have reviewed the circumstances and supporting documents involved in the above probable violations cited in Number 1 and have decided not to assess you a civil penalty. We advise you, however, that should you not correct the circumstances leading to the violations we will take enforcement action when and if the continued violations come to our attention.

Additionally, pursuant to 49 United States Code § 60118, the Office of Pipeline Safety proposes to issue to you a Compliance Order with respect to violation Number 1. That proposed compliance order is attached to and made a part of this Notice of Probable Violation.

In addition to this, the inspection revealed several areas of concern that we would like to bring to your attention. They are as follows:

- 1. Several CGT welding procedures fail to demonstrate that welds of suitable mechanical properties and soundness could be made. CGT procedures SMAW-01, SMAW-03, SMAW-09, SMAW-11, SMAW-15, SMAW-R01, SMAW-R02, and SMAW-03 give welders the choice of electrodes to weld a particular tensile strength of steel. An E60 series welding electrode used on an X-56 grade pipe, as allowed by your procedures, can produce a weld with mechanical properties that are not as strong as the pipe.
- 2. The review of welding procedures indicated that several procedures did not have data recorded necessary to conclude the welding procedure was followed in the welding tests. The weld test records were missing pertinent data such as: voltage, amperage, and travel speed.
- 3. CGT has developed new repair methods that allow partial and thruwall repairs. GMAW-R01 and SMAW-R01 are Partial/Thru-wall repair and Partial wall repair procedures, respectively. While these are understood to be part of a risk management project, personnel should not utilize these procedures until the risk management demo has been accepted and approved as a repair method.
- 4. The use of the SMAW-R02 procedure to repair corrosion pitting on any grade of steel greater than Grade B would be in violation of the pipeline safety regulations since it permits repair by a method other than specified in § 192.713.

- 5. While reviewing procedures and Weld Test Records, conflicting values were recorded for Time Between Passes.
- 6. Welding procedure SMAW-06 utilizes 7018 welding rod in the downhill direction. This rod is normally utilized for uphill use in most cases.
- 7. There were no sketches of joint design and welding parameters as specified by API 2.3.2.4 Joint Design.
- 8. All of CGT's SMAW procedures list a specific value in inches per minute for Travel Speed of the cap pass. The procedures should list a range of Travel Speed for the cap pass, considering conditions found during welding.

If we can answer any questions or be of any assistance, please contact me or my staff at (816) 426-2654. Thank you for your staff's cooperation during this scheduled inspection.

Also, attached to and made a part of this Notice is a description of the available procedures for responding to this Notice. Please note that if you elect to make a response, you must do so within 30 days of receipt of this Notice or waive your rights under 49 CFR 190.209. No response or a response which does not contest the allegations in the Notice authorizes the Associate Administrator for Pipeline Safety, OPS to find the facts to be as alleged herein and to issue appropriate orders. The 30 day response period may be extended for good cause shown and submitted within the original 30 days.

Sincerely,

Ivan A. Huntoon
Director, Central Region
Office of Pipeline Safety

## PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Office of Pipeline Safety proposes to issue to Columbia Gas Transmission Company a compliance order incorporating the following requirements to assure compliance with the pipeline safety regulations applicable to its operations.

- 1. In regard to Item No. 1 of the Notice pertaining to qualified welding procedures:
  - a) Verify the correct tensile value for materials being used in Weld Test Records and make the appropriate administrative changes to the Weld Test Records. Requalify any questionable Weld Test Records.
  - b) The CGT welding procedure SMAW 09 does not have a welding test record for Group B materials welded entirely with API 1104 Group 1 electrodes. Qualify this procedure before allowing any personnel to utilize it again.
  - c) The CGT welding procedure SMAW 08 does not have a welding test record that supports the procedure as written. Qualify this procedure before allowing any personnel to utilize it again.
- 2. These items are to be completed within 60 days following your receipt of the Final Order.
- 3. When appropriate actions have been completed and records have been prepared in regard to the above items in this Compliance Order, submit the records and notice of completed actions to the Director, Central Region, Office of Pipeline Safety, 1100 Main Street, Suite 1120, Kansas City, Missouri 64105.