



US Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh St S W  
Washington D C 20590

MAY 2 11:24

MAY - 2 2003

Mr Randy Barnard  
Vice President of Operations  
Williams Gas Pipeline - Northwest  
2800 Post Oak Boulevard  
MD - 21  
Houston, TX 77056

Re CPF No 5-2003-1003-H

Dear Mr Barnard:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It requires you to take certain corrective actions, including a pressure reduction, with respect to your 26-inch Line in western Washington State. Service is being made by certified mail and facsimile. Your receipt of this Order constitutes service of that document under 49 C.F.R. § 190.5. The terms and conditions of this Corrective Action Order are effective upon receipt.

Sincerely,

for Gwendolyn M Hill  
Pipeline Compliance Registry  
Office of Pipeline Safety

Enclosure

**VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND TELECOPY**

- Respondent's 26-inch natural gas transmission line on which the failure occurred is an interstate line, which runs from the Canadian border through western Washington State to the Columbia River and beyond. The maximum allowable operating pressure (MAOP) of the 50-mile line segment that includes the failure site is 674 psig. The MAOP has been reduced in recent years because increases in population near the pipeline changed the class location.
- There have been four previous failures due to land movement on the 26-inch line in the past eight years. The pipeline is located in an area of seismic activity that extends from the Canadian border to the Columbia River in Oregon. It also traverses many areas that have potentially unstable slopes. The compressor station nearest the Canadian border is Sumas, the station just north of the Columbia River is Washougal.
- The 26-inch line was constructed in the late 1950's. Unconfirmed information is that the pipe is DSAW steel of Kaiser manufacture with a wall thickness of 0.281 inches.
- Preliminary information on maintenance is that cathodic protection is acceptable in the area of the failure and that Respondent has conducted internal inspections of the line (using magnetic flux and geometry tools) in 1996. An inspection by the WUTC in June 2002 did not indicate any significant findings.
- OPS and WUTC investigators on scene have not identified the probable cause, or obvious contributing factors, of the failure.

#### **Determination of Necessity for Corrective Action Order and Right to Hearing**

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action as appropriate. The basis for making the determination that a pipeline facility is hazardous, requiring corrective action, is set forth both in the above referenced statute and 49 C.F.R. §190.233, a copy of which is enclosed.

Section 60112, and the regulations promulgated thereunder, provides for the issuance of a Corrective Action Order without prior opportunity for notice and hearing upon a finding that failure to issue the Order expeditiously will result in likely serious harm to life, property or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that the resumed operation of the Respondent's 26-inch line between the Sumas station near the Canadian border and the Washougal station near the Columbia River (Sumas-Washougal 26-inch line), without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, the population near the pipeline in western Washington state, the seismic activity in the

areas, the prior history of the pipeline, and the lack of a determination as to the cause for the failure, I find that a failure to expeditiously issue this Order, requiring immediate corrective action, would likely result in serious harm to life, property, and the environment.

Accordingly, this Corrective Action Order mandating needed immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. The hearing will be held in Denver, Colorado or Washington, D C on a date that is mutually convenient to OPS and Respondent.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other corrective measures that need to be taken. In that event, Respondent will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

#### **Required Corrective Action**

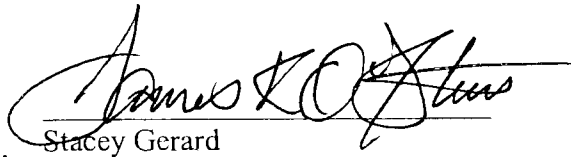
Pursuant to 49 U.S.C. § 60112, I hereby order Respondent to immediately take the following corrective actions with respect to its Sumas-Washougal 26-inch line:

1. Maintain an operating pressure not to exceed 80 percent of the MAOP. This pressure restriction shall remain in effect until Respondent obtains written approval to remove or modify the restriction from the Director, Western Region, OPS, as provided in paragraph 6 below.
2. Conduct a detailed metallurgical analysis of the pipeline that failed on May 1, 2003 to determine the cause of failure and contributing factors. Reevaluate analyses of the previous failures on the 26-inch pipeline and identify any system integrity-threatening trends. Submit an original copy of the report of these analyses to the Director, Western Region, OPS, within one week of your receipt of the report.
3. Re-evaluate past in-line inspection tool runs, including the 1996 surveys, in the area of the failure to determine whether the runs indicate any anomaly that could have contributed to the failure. If so, review the remainder of the surveys of the Sumas-Washougal 26-inch line for similar anomalies and take appropriate remedial action.
4. Perform a geotechnical evaluation of the immediate area of the failure. If any geotechnical anomalies are discovered, expand the evaluation to the remainder of the right-of-way of the Sumas-Washougal 26-inch line.

- 5 Submit information about the status of the evaluations done under paragraphs 3 and 4 to the Director, Western Region, within one week of the initial evaluation. If further evaluation is needed, provide information periodically and within one week of completion. Include within the information details about any corrective measures taken.
- 6 Respondent must obtain approval from the Director, Western Region, OPS to remove or modify the pressure restriction set forth in this order. Respondent must submit information that demonstrates that operating the segment at an increased pressure is justified based on an analysis showing that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.

Respondent may appeal any decision of the Director, Western Region, OPS to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator are final.

Failure to comply with this Order may result in the administrative assessment of civil penalties of not more than \$100,000 per day and in referral to the Attorney General for appropriate relief in United States District Court.



Stacey Gerard

*St* Associate Administrator  
for Pipeline Safety

MAY - 2 2003

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Date Issued



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Sincerely,

A handwritten signature in cursive script, appearing to read "Gwendolyn M. Hill".

*for* Gwendolyn M. Hill  
Pipeline Compliance Registry  
Office of Pipeline Safety

Enclosure

**VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND TELECOPY**

**DEPARTMENT OF TRANSPORTATION  
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION  
WASHINGTON, DC 20590**

In the Matter of )

Williams Gas Pipeline - Northwest, )

Respondent. )

CPF No. 5-2003-1003-H

**CORRECTIVE ACTION ORDER**

**Purpose and Background**

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Williams Gas Pipeline - Northwest (Respondent) to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure on Respondent's 26-inch natural gas pipeline in western Washington State that occurred on May 1, 2003. The cause of the failure has not yet been determined.

Pursuant to 49 U.S.C. § 60117, the Western Region, Office of Pipeline Safety (OPS) initiated an investigation of the incident. The Washington Utilities and Transportation Commission (WUTC), which, as an interstate agent, inspects the line for compliance with pipeline safety regulations, is participating in the investigation.

**Preliminary Findings**

- On May 1, 2003, at approximately 5:30 P.M. EDT, a rupture occurred at approximately M.P. 1352.7 on Respondent's 26-inch gas transmission pipeline near Lake Tapps in Pierce County, Washington. Respondent reported the failure to the National Response Center at approximately 7:30 P.M. EDT.
- The failure caused an explosion of significant force. The approximately 46-foot section of pipeline that failed broke into pieces that were catapulted approximately 250 feet from their original position. Approximately 21 feet of pipe has not yet been recovered. There was no ignition and no fatalities or injuries. The gas continued to be released for approximately an hour. A neighboring elementary school, a supermarket, and 30 to 40 houses in approximately a 4-mile area were evacuated.

- Respondent's 26-inch natural gas transmission line on which the failure occurred is an interstate line, which runs from the Canadian border through western Washington State to the Columbia River and beyond. The maximum allowable operating pressure (MAOP) of the 50-mile line segment that includes the failure site is 674 psig. The MAOP has been reduced in recent years because increases in population near the pipeline changed the class location.
- There have been four previous failures due to land movement on the 26-inch line in the past eight years. The pipeline is located in an area of seismic activity that extends from the Canadian border to the Columbia River in Oregon. It also traverses many areas that have potentially unstable slopes. The compressor station nearest the Canadian border is Sumas, the station just north of the Columbia River is Washougal.
- The 26-inch line was constructed in the late 1950's. Unconfirmed information is that the pipe is DSAW steel of Kaiser manufacture with a wall thickness of 0.281 inches.
- Preliminary information on maintenance is that cathodic protection is acceptable in the area of the failure and that Respondent has conducted internal inspections of the line (using magnetic flux and geometry tools) in 1996. An inspection by the WUTC in June 2002 did not indicate any significant findings.
- OPS and WUTC investigators on scene have not identified the probable cause, or obvious contributing factors, of the failure.

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areas, the prior history of the pipeline, and the lack of a determination as to the cause for the failure. I find that a failure to expeditiously issue this Order, requiring immediate corrective action, would likely result in serious harm to life, property, and the environment.

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#### **Required Corrective Action**

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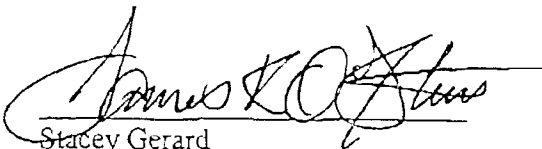
1. Maintain an operating pressure not to exceed 80 percent of the MAOP. This pressure restriction shall remain in effect until Respondent obtains written approval to remove or modify the restriction from the Director, Western Region, OPS, as provided in paragraph 6 below.
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3. Re-evaluate past in-line inspection tool runs including the 1996 surveys, in the area of the failure to determine whether the runs indicate any anomaly that could have contributed to the failure. If so, review the remainder of the surveys of the Sumas-Washougal 26-inch line for similar anomalies and take appropriate remedial action.
4. Perform a geotechnical evaluation of the immediate area of the failure. If any geotechnical anomalies are discovered, expand the evaluation to the remainder of the right-of-way of the Sumas-Washougal 26-inch line.



5. Submit information about the status of the evaluations done under paragraphs 3 and 4 to the Director, Western Region, within one week of the initial evaluation. If further evaluation is needed, provide information periodically and within one week of completion. Include within the information details about any corrective measures taken.
6. Respondent must obtain approval from the Director, Western Region, OPS to remove or modify the pressure restriction set forth in this order. Respondent must submit information that demonstrates that operating the segment at an increased pressure is justified based on an analysis showing that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.

Respondent may appeal any decision of the Director, Western Region, OPS to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator are final.

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Stacey Gerard  
Associate Administrator  
for Pipeline Safety

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