



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

JUL 25 2003


Mr. Bobby J. Talley
President
Olympic Pipeline Company
BP Amoco Corporation
2319 Lind Avenue SW
Renton, WA 98057

Re: CPF No. 59505-H

Dear Mr. Talley:

Enclosed is the Final Amendment to the Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. The Final Amendment restates in one location the safety measures that remain to be done for the future safe operation of the pipeline. Upon satisfactory completion of these measures, the case will be closed. Service is being made by certified mail and telecopy. Your receipt of the enclosed document constitutes service of that document under 49 C.F.R. § 190.5. The terms and conditions of this amendment are effective upon receipt.

Sincerely,


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

Enclosure

VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND FAX

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

In the Matter of
Olympic Pipeline Company and BP Amoco
Corporation ,
Respondents.

CPF No. 59505-H

FINAL AMENDMENT TO CORRECTIVE ACTION ORDER
Restatement of remaining requirements

On June 18, 1999, pursuant to 49 U.S.C. § 60112, the Associate Administrator, Office of Pipeline Safety (OPS) issued a Corrective Action Order finding that the continued operation of the Olympic Pipeline would be hazardous to life, property, and the environment without the implementation of corrective measures and requiring Olympic to take the corrective measures. The Order has been amended several times adding measures as additional pipeline operating and physical characteristics were revealed during the course of the investigation.

Since the Order was first issued in 1999, BP Pipelines (North America) has succeeded Equilon Pipeline Company as the operator of Olympic Pipeline. BP and Olympic have worked with OPS to identify additional corrective measures appropriate to assure the future safe operation of the pipeline. These have been incorporated into various plans developed under the Order, but have never been consolidated in one place.

Olympic and BP have completed a substantial portion of these corrective measures. Corrective measures have included internal inspections of the system using a variety of tools designed to locate corrosion, metal loss, deformations, and seam anomalies. Olympic and BP have analyzed and remediated, where necessary, the majority of the anomalies found through the internal inspections. They have completed the majority of the permanent repair work. There is a limited amount of work yet to be completed in order to close the case. The largest part of the work not yet complete is the remediation of anomalies discovered through the use of transverse flux inspection (TFI) tools. Olympic and BP conducted TFI inspections on all seamed pipe in the system. TFI is capable of detecting seam anomalies prior to growth of the anomaly to the point that it could fail during hydrostatic testing or operation. The comprehensive analysis of the TFI work was completed on June 30, 2003. Olympic now has to excavate the anomalies identified as potential safety issues and remediate any that prove to be so.

Olympic and BP have requested a clear statement of what remains to be done to support the removal of the pressure restriction now on the Olympic Pipeline system and close this case. Accordingly, this amendment restates in a single document the remaining corrective measures that will allow this case to be closed. The Regional Director, Western Region, OPS, will close the case upon satisfactory completion of these corrective measures.

Pursuant to 49 U.S.C. § 60112, I hereby further amend the order in this case by replacing the numbered paragraphs with the following numbered paragraphs. These new numbered paragraphs constitute a restatement of all remaining actions required in this case with respect to the Olympic Pipeline:

1. Continued operating restrictions. *Continue to restrict operating pressure on the Olympic Pipeline to 80 per cent of the maximum operating pressure (MOP) until receiving written approval from the Director, Western Region, OPS, to operate at a higher pressure. Approval for modification of the pressure restriction may be provided incrementally and shall be based on completion of corrective action as described below.*
2. Segments on which work is largely complete – 16-inch pipeline between the Cherry Point Refinery and Ferndale, Washington, 16-inch pipeline between Ferndale Station and Allen Station in Washington, 12-inch deliver system segment for Seattle/Tacoma Airport. *With the exception of work required because of the TFI tool, the corrective measures with respect to these segments have been completed. Until this is done the segments remain under a pressure restriction. In order to support a request for modification of the pressure restriction in paragraph 1, make the necessary documentation available to confirm completion of actions, including repairs as provided under paragraph 4.*
3. Annual plan for repairs.
 - a. *Prepare an annual plan for evaluation and repairs described in paragraphs 4 through 8 below. Establish priorities for evaluation, excavation, and repair of anomalies discovered through internal inspections conducted on the Olympic Pipeline that are consistent with the approach described in 49 C.F.R. § 195.452 for integrity management assessments. Include a schedule for all evaluations and repairs in the plan.*
 - b. *Submit the written plan to the Director, Western Region, Office of Pipeline Safety, RSPA, 12600 West Colfax Avenue, Suite A-250, Lakewood, CO 80215-3736, for approval by September 30, 2003, and on the same date every year thereafter until this case is closed.*
 - c. *Carry out the approved plan. Compliance with the approved annual plan to address anomalies discovered through internal inspection will be deemed to satisfy the requirements of 49 C.F.R. § 195.452 with respect to evaluation, excavation, and repairs of pipeline segments covered by that rule, including the notification requirements.*
 - d. *Prior to undertaking any of the evaluations or repairs in the plan, notify the Director, Western Region, of the specific schedule in writing in order to allow the Director to arrange to have a representative of the Western Region or the Washington Utilities and Transportation Commission monitor the work where appropriate. This written schedule must be updated monthly.*

Remaining actions with respect to seamed pipeline in the entire system, including the 12-inch pipeline between Renton and Seattle. In order to support a request for modification of the pressure restriction in paragraph 1 with respect to any of these segments, do the following.

- a. *Excavate the anomalies identified on the "dig" list from the transverse flux inspections in accordance with the repair plan approved under paragraph 3.*
- b. *Take appropriate remedial action, which may include replacement or permanent repair in accordance with the repair plan approved under paragraph 3.*

Remaining actions with respect to the 16-inch pipeline between Allen Station and Renton, Washington. In order to support a request for modification of the pressure restriction in paragraph 1, do the following.

- a. *Replace or adequately demonstrate seam integrity of Lone Star low frequency electric resistance welds on all such pipe located under the Stillaguamish River (MP 57.4) in accordance with the repair plan approved under paragraph 3.*
- b. *Replace or adequately demonstrate pipe integrity in the area of a 3 per cent dent anomaly identified by Olympic's May 2000 internal inspection of a segment under the Stillaguamish River (MP 57.4) in accordance with the repair plan approved under paragraph 3.*
- c. *Complete valve installations and upgrades in accordance with the repair plan approved under paragraph 3 as follows.*
 - i.) *Install and make fully operational from the Renton Control Center a new remote control gate valve at MP 105.*
 - ii.) *Make fully operational from the Renton Control Center new remote control gate valves at MP 59, MP 63, MP 98.5, MP 102, and MP 106.*
 - iii.) *Convert to remote control and make fully operational from the Renton Control Center existing hand operated gate valves at MP 72, MP 79, and MP 95.5.*
 - iv.) *Install a new check valve at MP 103.*

Remaining actions with respect to the 16-inch pipeline between Anacortes, Washington and the Allen Station. In order to support a request for modification of the pressure restriction in paragraph 1, replace or adequately demonstrate seam integrity of Lone Star low frequency electric resistance welds on all such pipe located under the Swinomish Slough (MP 2.8) in accordance with the repair plan approved under paragraph 3.


Remaining actions with respect to the 20-inch pipeline between the Allen Station and Renton, Washington. In order to support a request for modification of the pressure restriction in paragraph 1, make the following "critical repairs" as identified by Olympic's integrity management program criteria in accordance with the repair plan approved under paragraph 3. Excavate and mitigate a dent with metal loss anomalies identified by Olympic at MP 111.8. Make permanent repairs in place of the two existing temporary repairs located at MP 75.3 and MP 91.3.

8. Remaining actions with respect to the 14-inch pipeline between Renton, Washington and Portland, Oregon. In order to support a request for modification of the pressure restriction in paragraph 1, do the following in accordance with the repair plan approved under paragraph 3.
- a. "Critical repairs as identified by Olympic's integrity management program criteria. Excavate and mitigate a fifty percent metal loss anomaly identified by Olympic at MP 12.3. Make permanent repairs in place of the two existing temporary repairs located at MP 31.7 and MP 147.3.
 - b. Remaining segments of Kaiser pipe. Replace or adequately demonstrate the seam integrity of the remaining segments of low frequency electric resistance welded pipe manufactured by Kaiser identified below.
 - i.) Approximately 344 feet under the Columbia River.
 - ii.) Approximately 1,245 feet under the Mulnomah Channel.

Progress reports. Submit quarterly written progress reports to the Director, Western Region, OPS.

10. Modifications of schedules or particular actions. Respondents may request for good cause modification of the schedules or the details of the particular actions specified in this order. The Director, Western Region, has the authority to act upon such a request and to agree to modification. The approval of a modification by the Director must be in writing. Respondents may appeal a denial of modification to the Associate Administrator for Pipeline Safety.

Failure to comply with the Corrective Action Order, as amended, may result in the 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. The terms and conditions of this Amendment are effective upon receipt.



for Stacey Gerard
Associate Administrator
for Pipeline Safety

JUL 25 2003

Date Issued