

**National Transportation Safety Board
Internal Inspection Factual
Bellingham, Washington
Accident DCA99-MP008**

**Appendix 6 Washington Department of Ecology's administrative order DE 96CP-N269,
September 17, 1996**

FILE COPY

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

IN THE MATTER OF AN)	ORDER No.
ADMINISTRATIVE ORDER)	DE 96CP-N269
AGAINST: Olympic Pipe Line Company)	

**To: Olympic Pipe Line Company
2319 Lind Avenue Southwest
Renton, Washington 98057**

This is an Administrative Order requiring Olympic Pipe Line Company (Olympic Pipe Line) to comply with Chapters 90.48 and 90.56 RCW and the rules and regulations of the Department of Ecology (Ecology) by taking certain actions which are described below. RCW 90.48.120(2) authorizes Ecology to issue Administrative Orders requiring compliance whenever it determines that a person has violated any provision of Chapter 90.48 or 90.56 RCW.

Ecology's determination that a violation occurred is based on the following facts:

On June 17, 1996, a release of at least 1000 gallons of diesel fuel, jet fuel, and gasoline was discovered entering an unnamed ditch adjacent to the south bank of Ebey Slough, which is a violation of RCW 90.56 and 90.48. The ditch is connected through a series of culverts, ditches, and sloughs to the Snohomish River. The ditch itself as well as all of the waters leading to and including the Snohomish River are waters of the state. The source of the release was Olympic Pipe Line's 20-inch interstate underground petroleum line. Ecology response personnel observed petroleum product in the unnamed ditch and confirmed Olympic Pipe Line was the source.

Based on Ecology's investigation of this incident, we believe that the most probable cause of the pipeline buckling and leaking in June was due to original construction damage and use of material that did not meet backfill specifications when the line was originally installed in 1972. However, given the subsequent discovery by Olympic Pipe Line of a similar buckle on the pipeline on September 5, 1996, at another river crossing south of the spill site, additional concerns have been raised regarding the cause of buckling at the second location and the potential for environmental harm. In addition, Olympic Pipe Line experienced difficulties physically locating the pipeline during the spill and follow-up field inspections on September 5th and 6th, 1996.

During the years following construction of the pipeline, Olympic Pipe Line has utilized many tools to determine the condition of the pipeline. In the past year Olympic Pipe Line used a magnetic flux inspection tool to ascertain pipeline integrity. This internal tool was used within a few months of the break and showed no clear signs of any pipeline problem when the inspection data was initially analyzed. In reviewing the original data in hindsight, however, Olympic Pipe Line and the company that developed the tool have identified an "indicator" or potential anomaly at the location of the break. This indicator did not meet standard established criteria for an anomaly and so the tool company did not inform Olympic Pipe Line about this information.

In addition to the magnetic flux tool, Olympic Pipe Line has utilized a caliper tool to determine the condition of the pipeline. In 1991 the caliper pig was sent through the pipeline to prove that the magnetic flux tool could safely traverse the line. The caliper tool data was analyzed and has shown some significant anomalies in the pipeline that do not match construction drawings. For example, the caliper tool showed a 45 degree elbow at the buckle location whereas the pipeline construction drawings showed a 22.5 degree elbow. Field measurements at the spill site showed a 30 degree bend with an additional seven degree wrinkle bend caused by the buckle. In hindsight, knowing the accuracy of the caliper tool in relation to the construction drawings would have been very useful in confirming bends, elbows, fittings, and other physical pipeline features as well as potential problems like the buckle that resulted in the spill.

Olympic Pipe Line has indicated that both the caliper and the magnetic flux tool data could be more thoroughly analyzed and evaluated for its effectiveness. This analysis and the information learned in hindsight to this spill may provide information on other potential problems areas of the pipeline where spills could occur. This information is necessary in order to protect waters of the state from the environmental harm associated with any future spills.

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For these reasons, and in accordance with RCW 90.48.120(2):

IT IS ORDERED THAT Olympic Pipe Line, upon receipt of this Order, shall take appropriate action in accordance with the following instructions:

- 1. Within 30 days of receipt of this Order, Olympic Pipe Line must submit a schedule satisfactory to Ecology for a review and analysis of pipeline magnetic flux tool data for the entire pipeline system for potential anomalies similar to those found after the Ebey Slough spill. In order to accomplish this analysis, Olympic Pipe Line must run the magnetic flux tool through those pipeline sections for which data does not exist.**
- 2. Olympic Pipe Line must submit to Ecology a report of the magnetic flux data analysis within 30 days of completion. The report must explain the cause of all identified anomalies. Significant anomalies that can not be excused by examination of data must be verified by field inspections of the pipeline sections involved. Olympic Pipe Line must provide a schedule satisfactory to Ecology for conducting any necessary inspection work.**
- 3. Within 30 days of receipt of this Order, Olympic Pipe Line must submit a schedule satisfactory to Ecology for a comparative analysis of caliper tool data and construction drawings for the entire pipeline system to identify any discrepancies between the two. In order to accomplish this analysis, Olympic Pipe Line must run the caliper tool through those pipeline sections for which data does not exist.**
- 4. Within 30 days of completion of the scheduled analysis in item 3 above, Olympic Pipe Line must submit a report to Ecology. This report must identify where there are any discrepancies between the caliper tool data and the pipeline construction drawings. Significant discrepancies must be investigated and verified by field inspections of the pipeline. Olympic Pipe Line must provide a schedule satisfactory to Ecology for conducting any necessary inspection work.**
- 5. Olympic Pipe Line must continually monitor and record data from the two strain gauges recently placed on the 16 and 20 inch pipelines at the south Ebey Slough crossings after the spill. Within 180 days of receipt of this Order, Olympic Pipe Line must submit a report on the results of this monitoring effort including any findings that might affect the integrity of the pipeline or pipeline operations in a manner that may result in future releases to waters of the state. The report must also contain specific recommendations for follow-up and/or corrective actions.**

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6. Within 60 days of receipt of this Order, Olympic Pipe Line must provide a written report on the cause of the second pipeline buckle discovered at the Ebey Slough river crossing south of the spill site including its relationship to the first buckle at the original spill site. As part of this analysis, Olympic Pipe Line must contact the City of Everett regarding the reported buckling that occurred in their water lines near Ebey Slough and report any information or conclusions that might be relevant to the buckling of the oil pipeline.
7. Within 90 days of receipt of this Order, Olympic Pipe Line must submit a detailed map(s) illustrating the pipeline location at all major river and stream crossings. The map(s) must also verify that the pipeline markers at all of the crossings are properly located.

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

This Order may be appealed. Your appeal must be filed with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, WA 98504-0903 within thirty (30) days of your receipt of this order. Concurrently, your appeal must also be served on the Department of Ecology, c/o The Enforcement Officer, P.O. Box 47600, Olympia, Washington 98504-7600; and on the Department of Ecology, Northwest Regional Office, Spill Operations Enforcement Coordinator, 3190 160th Avenue Southeast, Bellevue, Washington 98008-5452. Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Chapter 43.21B RCW.

DATED SEP 17 1996 at Bellevue, Washington.



Paul O'Brien
Regional Supervisor
Spill Response and Planning